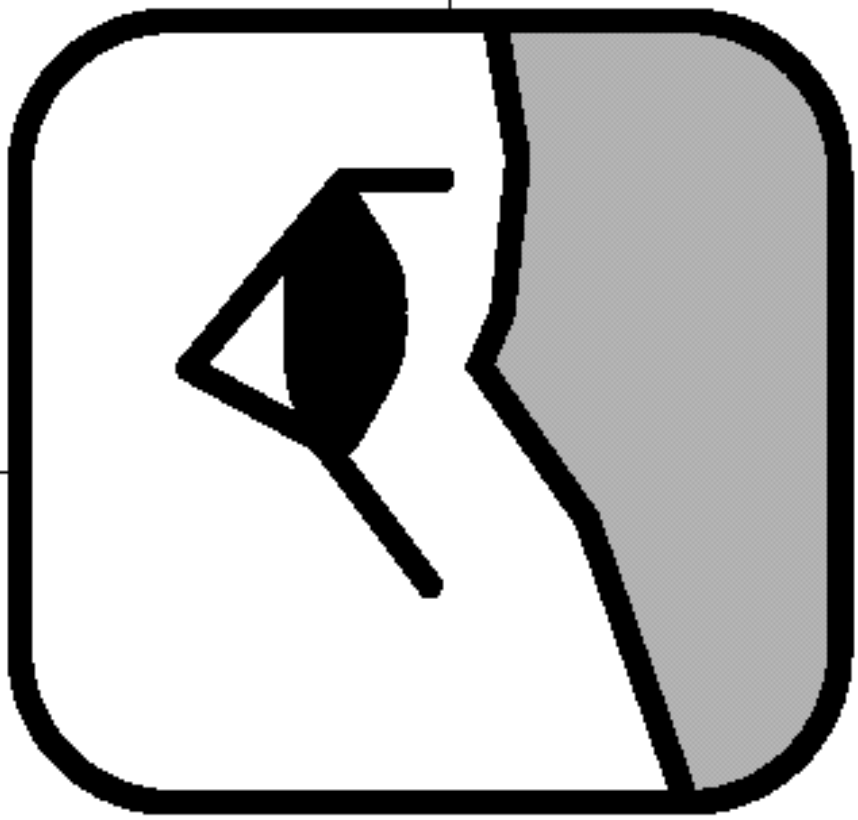
PHILIPS

Philips Medical Systems

Release Bulletin

EasyVision RAD
Release 4.2 L6
System & Application Software



Manual Order No. 4522 170 01174

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

Release Bulletin

EasyVision RAD

Release: 4.2V2 Level 6

Author: Philips Medical Systems
Development and Manufacturing Centre GmbH
Hamburg, Germany
C.Siems, Development GXR

Manual Order No.: 4522 170 01174

Printed in Best
The Netherlands

© 1999- 2004 Philips Medical Systems
All rights reserved. No part of this publication may be reproduced or transmitted, in any form or by any means, without permission.

Copyright © 2004 Philips Medical Systems

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

Contents

1 INTRODUCTION 9

1.1 Abbreviations and Definitions 9

2 RELEASE INFORMATION 10

2.1 Contents of the Software Package 10
2.1.1 Available Software Options R 4.2 L6 10

2.2 New Features 11

2.3 Solved Problems of Level 5 12

2.4 Known Limitations 12

2.5 Compatibility 13
2.5.1 CD-R media 13
2.5.2 Optical disks 13
2.5.3 Printers 13
2.5.4 Interoperability network transfer 13
2.5.5 File export (JPEG, TIFF) 13
2.5.6 USB devices 14

3 SOFTWARE LICENSING 15

3.1 Uploading a license file 15

4 UPDATING TO RELEASE 4.2 L6 16

4.1 Updating from Level 1.. 3 to Level 6 16
4.1.1 Installing the operating system 17
4.1.2 Installing the application software 33
4.1.3 Configuring new printers 35

4.2 Updating Level 4 or 5 to Level 6 36
4.2.1 Configuring new printers 37

5 RE-INSTALLING THE SOFTWARE 38

5.1 Introduction 38

5.2 Re-installing the operating system from CD 39

5.3 Re-installing the operating system from DVD 54

5.4 Installing the application software 60

6 INSTALLING SOLARIS SECURITY PATCHES 62

7 USING THE CONFIGURATION PROGRAM 63

7.1 The Setup Database 63

7.2 Starting up the configuration program 64

7.3 Executing the configuration 65

7.4 Removing corrupted configuration files 66

8 CONFIGURATION 67

8.1 Configuring a server/client cluster 68

8.2 Configuring a client 69

8.3 Software licenses 70
8.3.1 Visual overview 71

Copyright © 2004 Philips Medical Systems

8.4 Cluster Data 71

8.5 Configured Nodes 72
8.5.1 EasyVision 73
8.5.1.1 Framebuffer/Monitor Settings 74
8.5.1.2 Peripheral Settings 75
8.5.1.2.1 Configuring printers 76
8.5.1.2.2 Ethernet Controllers 78
8.5.1.2.3 IP Router Settings 79
8.5.1.3 PPP Connection Settings 81
8.5.1.4 DICOM Settings 81
8.5.2 DSI 82
8.5.3 VISUB 82
8.5.4 VISUB via HSDII 83
8.5.5 DCI 84
8.5.6 CT scanner 84
8.5.7 MR scanner 84
8.5.8 EasyVision via PMSNet 85
8.5.9 PMSNet Export Node 86
8.5.10 PMSNet Import Node 87
8.5.10.1 THORAVISION 88
8.5.11 DICOM Node 88
8.5.11.1 EasyVision Mammo 90
8.5.12 DICOM Printer 91
8.5.13 Reader Node 92
8.5.14 Network Printer 93
8.5.15 Advanced settings 93

9 EXTENDED DICOM SETTINGS 95

9.1 STORE SOP CLASSES 96

9.2 FIND & MOVE SOP CLASSES 96

9.3 TRANSFER SYNTAX 97

9.4 TRANSFER SETTINGS 98
9.4.1 SCP: Conversion Settings for DICOM Store 99

10 DICOM BACKGROUND 101

10.1 What are SCU and SCP? 101

10.2 Application Entity 101

10.3 Presentation Address 101

10.4 Port Numbers 101

10.5 Query/Retrieve SOP Classes 101

10.6 Transfer Syntax 102

10.7 Transfer Settings 103

11 ADVANCED PRINTER CONFIGURATION 105

11.1 Adding a new printer using a "Property" or "PrinterPrototype" file 107

12 CUSTOMIZING 109

13 BACKUP AND RESTORE OF CONFIG FILES 110

13.1 Complete backup via Setup Database 110
13.1.1 Backing up the Setup Database 110
13.1.2 Restoring the Setup Database 111

13.2 Backing up and restoring single config files 112
13.2.1 Backing up and restoring processing protocols 113
13.2.2 Backing up and restoring print protocols 114

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

13.2.2.1 Backing up print protocols 114
13.2.2.2 Restoring print protocols....115

14 TRANSFERRING CONFIG AND LOG FILES 116

14.1 Via internal floppy drive....116

14.2 Via USIT 116
14.2.1 ... from EasyVision to USIT 117
14.2.2 ... from USIT to EasyVision 117

14.3 Via FTP....118

14.4 Via CD-R 118

14.5 Via USB memory stick 118

15 ERROR LOGGING....120

15.1 Collecting log files....120

16 PROCESSING PROTOCOLS....121

16.1 adbConvert....121

16.2 Installing Processing Protocols from Release 2.3....122

17 ADVANCED PRINT FOR DIGITAL DIAGNOST 123

17.1 Introduction....123

17.2 Setting up Advanced Print....124
17.2.1 Setting up EasyVision RAD 124
17.2.2 Setting up Digital Diagnost 125

17.3 Printing Digital Diagnost images and PCR images on same Film 126

18 RECOVERING THE PASSWORD FOR THE PROCESSING TOOL....127

19 REMOTE SERVICE VIA VNC....128

20 COMMUNICATION WITH PHILIPS MEDICAL SYSTEMS 130

Copyright © 2004 Philips Medical Systems

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

1 INTRODUCTION

This Release Bulletin describes:

- Features, solved problems, known limitations of Release 4.2 Level 6.
- Initial installation of the software on:
  - A stand-alone EasyVision RAD (or single user system)
  - More EasyVisions within a cluster consisting of a server and one or more clients.
- Configuring the EasyVision RAD in a cluster
- Reinstalling and upgrading the software.

The intended reader is the service engineer.

For an initial delivery of the system, the software is pre-installed in the factory and the Software License file is loaded on the stand-alone or server EasyVision RAD.

1.1 Abbreviations and Definitions

ACR-NEMA	American College of Radiology- National Electrical Manufacturers Association
CD-R	CD recordable
CRT	Cathode Ray Tube
DICOM	Digital Imaging and Communications in Medicine
DOR	Digital Optical Recorder
DSI	Digital Spot Imaging
DVD	Digital Versatile Disc
EV	EasyVision
EVRAD	EasyVision RAD
HCU	HardCopy Unit (Printer)
HIS	Hospital Information System
IP	Internet Protocol or Imaging Plate
LCD	Liquid Crystal Display
MAC	Media Access Control
MAC address	48-bit address of an Ethernet adaptor (fixed and worldwide unique for every adaptor)
MIT	Medical Information Technology (The PMG formerly known as, MIMIT, EVM, ICS...)
NFS	Network File System
SC	Secondary Capture
OD(R)	Optical Disk (Recordable)
OS	Operating System
PACS	Picture Archiving and Communication System
PPP	Point-to-Point Protocol
RIS	Radiology Information System
SCP	Service Class Provider
SCU	Service Class User
SOP	Service Object Pair
SPI	Standard Product Interconnect
TCP/IP	Transmission Control Protocol / Internet Protocol
VNC	Virtual Network Connection
WW/WL	Window Width / Window Level

Copyright © 2004 Philips Medical Systems

2 RELEASE INFORMATION

EasyVision RAD 4.2 Level 6 is the successor of EasyVision 4.2 releases. Main reason for releasing L6 is to support new hardware for the SunBlade 1500 computer.

Please note that the delivered DICOM conformance statement from Level 4/5 remains valid.

Please refer also to chapter 2.4 Known Limitations.

2.1 Contents of the Software Package

The EasyVision RAD software Release 4.2 L6 is distributed by 9896 050 03237

The software-package consists of the following media:

- CD EV RAD R4.2V2 L6 software 4522 170 01154
- License CD 4522 170 03451
- Release Bulletin EasyVision RAD R4.2 L6 4522 170 01174
- DICOM Conformance Statement EasyVision R4.2L4/5/6 4522 170 01182
- DVD Solaris 8 5/03-600 (operating system) 4522 170 03332

2.1.1 Available Software Options R 4.2 L6

The following options are available:

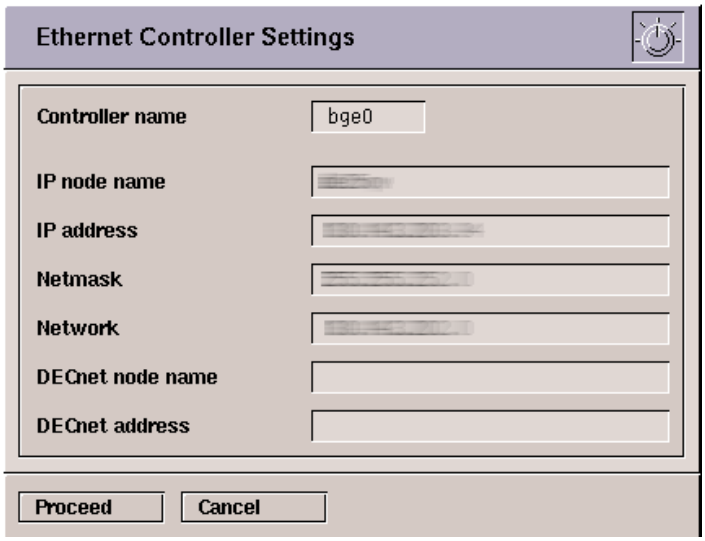
	9896 050 .....
EV RAD/PCR SW-KEY 4.2	03241
EVRAD DRR SW-KEY 4.2	03251
EVRAD SERVER SW-KEY 4.2	03291
EVRAD SING.USER SW-KEY4.2	03301
EVRAD WORKSPOT SW-KEY 4.2	03311
EVRAD COMMUN. SW-KEY 4.2	03321
EVRAD EASYPRINT SW-KEY 4.2	03331
EVRAD SCR. NAV. SW-KEY 4.2	03341
EVRAD CD-REC SW-KEY 4.2	03351
EVRAD STORE OD SW-KEY 4.2	03361
EVRAD SPINE SW-KEY 4.2	03921
SPINE TUTORIAL GUIDE	03882
EVRAD LEGS SW-KEY 4.2	03931
LEGS TUTORIAL GUIDE	03892
EVRAD BCR SW-KEY 4.2	03941
EVRAD NETVIEW SW-KEY 4.2	03951
EVRAD NETV ADDLIC SWKEY42	04141
EVRAD XRAY EASYV.SWKEY4.2	03961
EVRAD XRAY VASC. SWKEY4.2	03971
EVRAD COLONMAP SW-KEY 4.2	03981
EVRAD ALL DEMO SWKEYS 4.2	03993
EV RAD ORTHO SW-KEY 4.2	05251
EVRAD UNIQUE SW-KEY 4.2	05481

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

2.2 New Features

Ethernet controller settings

A new configuration item has been added to the Ethernet controller settings: Network. This value is written to the file **/etc/netmasks** as **network number.** Keep the proposed default value or ask the system administrator.



Supported new hardware

EasyVision RAD Release 4.2 Level 6 supports the following new hardware:

- IDE image disks
- Plextor Plexwriter 40/12/40S external SCSI CD writer
- Framebuffer XVR-100
- SCSI controller UltraSCSI SE X5010A
- Kodak 8900 DICOM printer
- 2 GB of memory
- Swift Fast Ethernet controllers (ce)

Copyright © 2004 Philips Medical Systems

2.3 Solved Problems of Level 5

Date is show in english
Problem: Date is show in english though another language is configured.
Solution: Problem of Solaris 8 corrected.

Class C networks
Problem: Class C networks cannot be configured.
Solution: Additional configuration item added: Network.

2.4 Known Limitations

Philips 18" grayscale LC Displays

For connected Philips 18" grayscale LC Displays only: After reloading software it may be possible that the display stays dark and a message "UNSUPPORTED MODE" is displayed. When the application software starts up and the system switches to graphics mode everything is ok.

Solution: About 30 to 50 seconds after switching on the EV RAD press <Stop>+<A>
Though the monitor maybe black enter at the ***ok*** prompt:

<Enter>
setenv output-device screen:r1280x1024x76
reset-all

Please note that a beep will sound. This confirms the "reset-all" command.

Stitching zoomed images

It is not possible to stitch zoomed images. Stitching images with zoom factors other than 1 cannot be stitched and the belonging button is not active: .

Restoring Setup Database

Before backing up the Setup Database make sure that all queries in the application are deleted. The application may crash after restoring a Setup Database with queries. This is a software bug.

When a Setup Database has been restored whith existing queries do the following to recover:

- Go to **Configuration** and select **Setup Database**.
- Click [**Query**].
- Select [**Tools**].
- Click [**Confirm**].
- If an entry exists: select the entry and click [**Info**].

  If something like **not implemented** is displayed click [**Delete**] to delete the corrupted queries.

  If no entries exist: there are queries, you are done.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

2.5 Compatibility

2.5.1 CD-R media

The option **EasyStoreCD** in conjunction with the Plextor PlexWriter 12/10/32 CD-R drive supports 650MB CD-Rs only. CD-RWs (re-writable) are not supported.

2.5.2 Optical disks

The following media are compatible for writing and reading images via the EasyStore drive:

- Pioneer 600 Mbyte (DEC-702) 512 bytes/sector drive type: Pioneer DE-UH7101
- In general all image data written by previous releases can be read and used in EasyVision R4.2.
- Optical disk compatibility is not affected by the DICOM implementation. The existing compatibility is maintained.
- WORM (Write Once Read Many) ODR: These types of optical disks can still be read in EasyVision R4.2, but not written.

2.5.3 Printers

The names of the compatible laser printers are listed in the **Imager Compatibility Manual**, which is attached to the Service Manual and delivered with the system.

Refer also to the following page on the MIT homepage on the intranet for the latest config settings:

Technet > MIT > INTEROPERABILITY > PRINTING > PRINTER DATABASE

2.5.4 Interoperability network transfer

EasyVision R4.2 is compatible for input of images via network transfers from acquisition stations with the following releases:

- DSI Release 3.2 and 4 up to 4.4 and 5.1. (PMSNet or DICOM), Rel.5.2.1

EasyVision R4.2 is compatible for import/export of images via net transfers from EasyVisions using the option "Communication" with the following releases:

- EasyVision CT/MR R1.1, R1.2 and R2.1
- EV X-Ray R3.1 (only if the Export option is installed)
- EasyVision R/F Releases R2.2
- EasyVision R4.x
- EasyVision RAD 2.3
- Digital Diagnost 1.x

2.5.5 File export (JPEG, TIFF)

EasyVision R4.2 supports export of images to hard disk or CD-Recordable in JPEG and TIFF file format. File export is intended for presentation purposes only. These images are not intended for diagnostic viewing or further processing. Image quality may be limited due to reductions in image size or pixel range, or due to the use of bad compression techniques.

It is not possible to fixate images in JPEG or TIFF format when stored on CD-R with a CD-R recorder.

Copyright © 2004 Philips Medical Systems

2.5.6 USB devices

For Service purposes it is possible to connect an USB memory stick or a USB external hard drive to the SunBlade computer. This may be useful for transfering Service images, processing key etc.

Prior using an USB device it must be mounted within the Service mode:

- Enter Service mode.

- Go to command prompt.

- Connect the USB stick.

- Enter **mount_usb**
  the system should respond with ***/dev/dsk/c4t0d0s0:c USB stick now mounted at /mnt***

  The memory stick is now mounted to **/mnt.**

- Before removing the stick don't forget to umount the device: ***umount /mnt***

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

3 SOFTWARE LICENSING

Every software package is licensed to a specific system. Permanent license keys provide an indefinite time period for using an EasyVision option. The license file is factory installed on EasyVision and also delivered on a backup floppy.

The license file can be viewed via the configuration program. The license file is named **license.dat** and is located in the directory **/easydata** on the Sun computer.

The License file contains:
- Sun HostID of the license server system
- Sun HostID of the system where the option is enabled
- Name and release identification of the option(s)
- Expiration date per option
- Encrypted string being the actual license key for each option

Although the PCR system is a product of the PMG GXR in Hamburg the software license files can be found on the intranet on the **Medical IT homepage** in the section ***License Files***.

There is one license file per standalone or server/-(s) EasyVision. In case of an EasyVision cluster the license file is loaded on the server and contains also license data for its clients.

In case the customer orders an additional option, the new license file contains all current license keys + the new license key(s).

EasyVision options can be ordered using the MCR/MCS numbers as listed in the commercial catalogue. After ordering, a **Request for software license file form** is sent to the SSD, which has to be filled out and returned, by mail or fax to the operations department of the PMG GXR at Medical Systems in Hamburg. With this information a new “Software license file” is generated and put to the Intranet or sent via e-mail or floppy to a specified address. The new options can be installed by uploading the file to EasyVision (see **Uploading a license file** below).

There are two types of licenses, **Permanent** and **Demo** License Keys:

Permanent License Keys
... provide an indefinite time period for using an EasyVision option.
... are initially factory installed on EasyVision and are delivered on a backup floppy with EasyVision.

Demo License Keys
... provide the use of an EasyVision Demo application package for a limited period of 3 months.
... are active from the day of key-generation until it expires automatically after 3 months.
... are not factory installed, because they could (partly) expire before the installation at customer site.
... are not available for all options, because additional hardware may be required. Only for some demo keys hardware can be ordered. See the commercial catalogue for more information.

3.1 Uploading a license file

The license file is named **license.dat** and is located in the directory **/easydata** on the Sun computer.

A new license file shipped by the PMG is usually named **<HostID>.dat** (e.g. 80ba6721.dat). The file must be copied to the directory **/easydata** on the Sun computer and renamed or copied to **license.dat,** e.g. ***cp 80ba6721.dat license.dat***). In Level 5 a new feature has been implemented to upload a License File also from CD.

Then go to the configuration program and **Execute** the configuration (see **Executing the configuration** on page 65).

To upload the file please refer to chapter **Transferring Config And Log Files** on page 116.

Copyright © 2004 Philips Medical Systems

4 UPDATING TO RELEASE 4.2 L6

This chapter describes the necessary procedures to update the EasyVision RAD R 4.2 software to Level 6.

A software upgrade from EasyVision RAD Rel. 2.x to 4.2L6 is not possible since R4.2 is designed to run only on Sun Ultra 5/10/60 (Level 1/2/3) and SunBlade (Level L4/5/6) hardware. The hardware of a SparcStation 5 is not supported.

Level 6 has been changed in both the operating system and the application software. Therefore a complete new installation is mandatory when updating from Level 1..3. When updating from Level 5 it is only necessary to install the application software. The image database of Level 2..5 can be kept when upgrading to L6.

Procedure

When updating from Level 1..3 : see chapter Updating from Level 1.. 3 to Level 6 on this page.

When updating from Level 4 or 5 : see chapter Updating Level 4 or 5 to Level 6 on page 36.

4.1 Updating from Level 1.. 3 to Level 6

This chapter describes the necessary procedures to update the software from EasyVision RAD R 4.2 L1/2/3/ to L6.

Survey of Actions

- Though existing configuration data is kept, it is recommended to make a backup of the existing configuration files, customizing files and the license file (see also: **Backup and Restore Of Config Files** on page 110).
- Shutdown the EasyVision RAD.
- Boot Solaris from CD-ROM
- Partition the system disk and, if applicable, the image disk(s).
- Install the operating system from CD (see **Installing the operating system** on page 17)
- Install application software (see **Installing the application software** on page 33).
- Enter configuration program (see **Starting up the configuration program** on page 64. The existing config should be there).
- When upgrading from Level 1 software: re-configure all DICOM Readers from the node type DICOM node to the new type **Reader node**.
- Execute the configuration (see **Executing the configuration** on page 65); keep existing image database, if applicable.

Important

*Upgrading an EasyVision RAD system with R 4.2 L1 to 4.2 L6 it is mandatory to reconfigure all DICOM Readers (AC500/5000, ...) from the node type **DICOM node** to **Reader node.***

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

4.1.1 Installing the operating system

During the Solaris installation on a system with a **DOME MD2 grayscale card** installed, the monitor must be connected to the on-board graphics adaptor or to the true-color card so that a full color screen is used. The presence of the DOME MD2 card will be detected during the installation of the application software: a question whether this card will be used, as the EasyVision display controller has to be confirmed then. At the next reboot the monitor must be connected to the MD2 card.

CD-ROMs needed:

Solaris 8 - Installation
Software 1 of 2
Software 2 of 2
Documentation
Software Supplement

1. For systems with a **Dome Md2** grayscale card:
   Connect the monitor to the on-board graphics adaptor.

   At the ***ok*** prompt enter ***setenv output-device screen***.

2. Insert the CD **Solaris 8** ***Installation*****.**

3. At the ***ok*** prompt enter : ***boot cdrom***

4. Enter: ***n***

```
The default root disk is /dev/dsk/c0t0d0.
The Solaris installer needs to format
/dev/dsk1c0t0d0 to install Solaris.

WARNING:  ALL INFORMATION ON THE DISK WILL BE ERASED!

Do you want to format /dev/dsk/c0t0d0?  [y,n,?,q]
```

5. Enter **1.**

```
The following disks were found on your system:
1) /dev/dsk/c0t0d0
2) /dev/dsk/c2t11d0
q) Quit

Select a disk to place the Solaris installer software, or
select to exit the installer.

WARNING: ALL INFORMATION ON THE DISK WILL BE ERASED!
Please make a selection. >
```

Note: The **number of image disk is depending on the hardware configuration**.

6. Enter ***1024***

```
NOTE: The swap size cannot be changed during filesystem layout.

Enter a swap slice size between 352MB and 8691MB, default = 512MB [?]
```

Note: The shown values may vary depending on your system.

Copyright © 2004 Philips Medical Systems

7. Enter ***y***

```
The Installer prefers that the swap slice is at the beginning of the
disk.  This will allow the most flexible filesystem partitioning later in the
installation.

Can the swap slice start at the beginning of the disk [y,n,?,q]
```

8. Enter ***y***

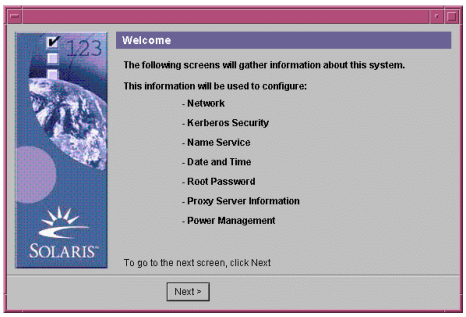
```
You have selected the following to be used by the Solaris installer:
Disk Slice : /dev/dsk/c0t0d0
Size : 1024 MB
Start Cyl.  : 0

WARNING: ALL INFORMATION ON THE DISK WILL BE ERASED!

Is this OK [y,n,?,q]
```

9. Now, error messages may be displayed. ***Don't panic!*** Just ignore them.

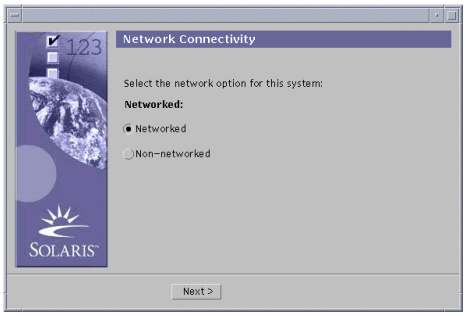
10. Files are being copied. This may take up to **10 minutes**. When done, the system reboots automatically.

```
...
After files are copied, the system will automatically reboot, and
installation will continue.
Please Wait...
Copying mini-root to local disk. \
```

11. After a while the **Welcome** window appears.
Click [**Next**>].



12. Select **Networked** and click [**Next**>].

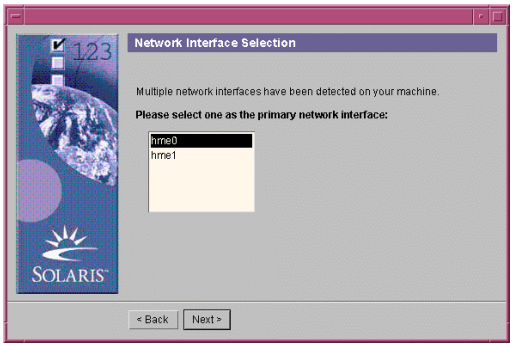


13. When there are more than one network adaptors installed in the system the following window **may** appear. If not, go to step 15.

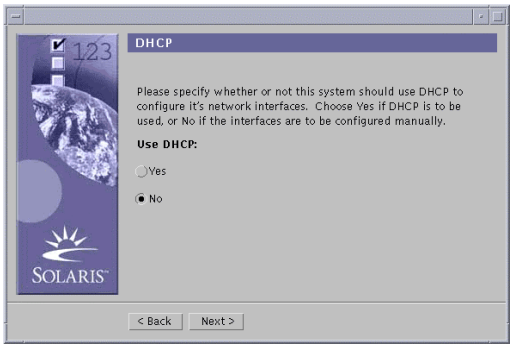
Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

For an Ultra 10 or 60 select **hme0**,
for a SunBlade 1000/2000 select **eri0**,
for a SunBlade 1500 select **bge0, ge or ce**.

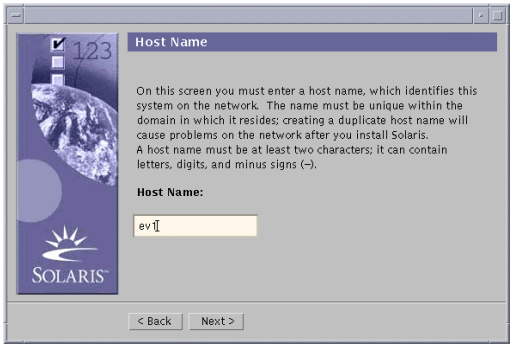
Click [**Next**>].



14. Select **No** and click [**Next**>].


DHCP
Please specify whether or not this system should use DHCP to configure it's network interfaces. Choose Yes if DHCP is to be used, or No if the interfaces are to be configured manually.
Use DHCP:
Yes
No
SOLARIS
< Back
Next >

15. Enter the host name (e.g. ev1) and click [**Next**>].

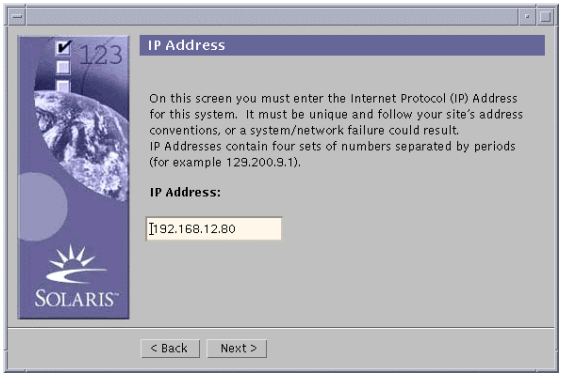

Host Name
On this screen you must enter a host name, which identifies this system on the network. The name must be unique within the domain in which it resides; creating a duplicate host name will cause problems on the network after you install Solaris.
A host name must be at least two characters; it can contain letters, digits, and minus signs (-).
Host Name:
ev1
SOLARIS
< Back
Next >

NOTE

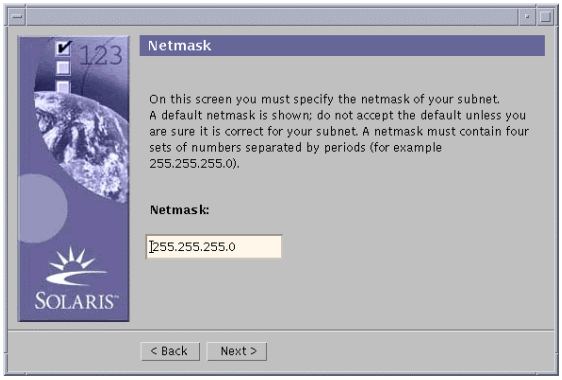
Solaris 8 installation procedure does not accept underscores "_" in the host name. Therefore do not use underscores in above panel. When you want to use underscores anyway (e.g. in case of upgrading a system which was already defined in the network with a host name including underscores), you can define the IP Node Name (incl. underscores) of the EasyVision in the config main panel. This way you do not have to reconfigure the IP Node Name on other systems that are addressing this EasyVision.

16. Enter the IP address and click [**Next**>].

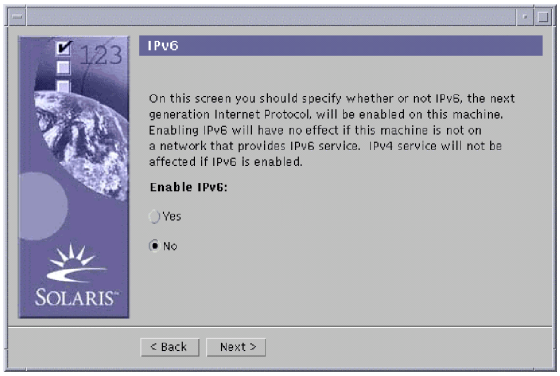
Copyright © 2004 Philips Medical Systems


IP Address
On this screen you must enter the Internet Protocol (IP) Address for this system. It must be unique and follow your site's address conventions, or a system/network failure could result.
IP Addresses contain four sets of numbers separated by periods (for example 129.200.9.1).
IP Address:
192.168.12.80
< Back
Next >

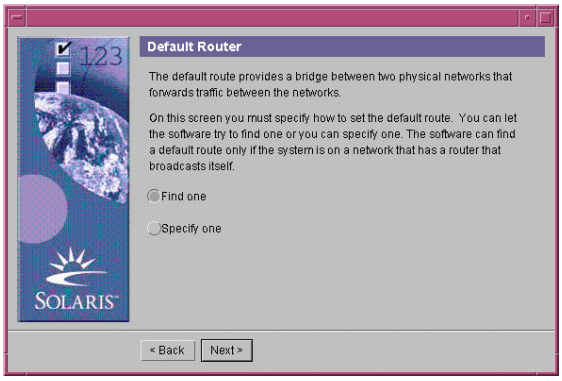
17. Verify the netmask and click [**Next**>].


Netmask
On this screen you must specify the netmask of your subnet.
A default netmask is shown; do not accept the default unless you are sure it is correct for your subnet. A netmask must contain four sets of numbers separated by periods (for example 255.255.255.0).
Netmask:
255.255.255.0
< Back
Next >

18. Select **Yes** and click [**Next**>].

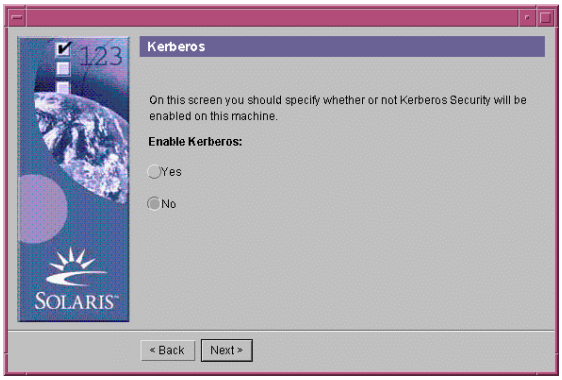

IPv6
On this screen you should specify whether or not IPv6, the next generation Internet Protocol, will be enabled on this machine.
Enabling IPv6 will have no effect if this machine is not on a network that provides IPv6 service. IPv4 service will not be affected if IPv6 is enabled.
Enable IPv6:
Yes
No
< Back
Next >

19. Select **Find one** and click [**Next**>].

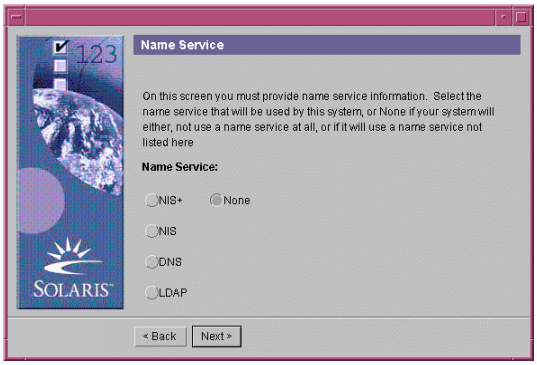

Default Router
The default route provides a bridge between two physical networks that forwards traffic between the networks.
On this screen you must specify how to set the default route. You can let the software try to find one or you can specify one. The software can find a default route only if the system is on a network that has a router that broadcasts itself.
Find one
Specify one
< Back
Next >

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

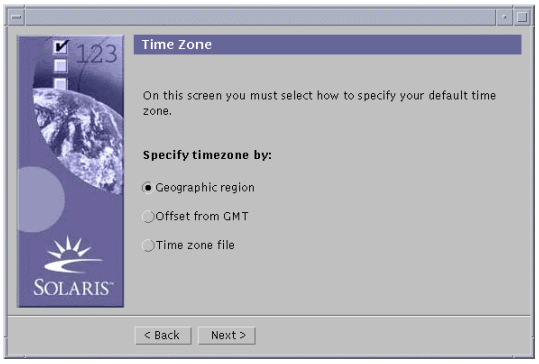
20. Select **No** and click [**Next**>].


Kerberos
On this screen you should specify whether or not Kerberos Security will be enabled on this machine.
Enable Kerberos:
Yes
No
< Back
Next >

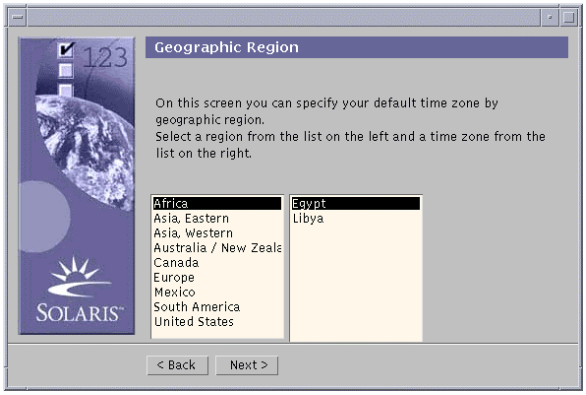
21. Select **None** and click [**Next**>].


Name Service
On this screen you must provide name service information. Select the name service that will be used by this system, or None if your system will either, not use a name service at all, or if it will use a name service not listed here
Name Service:
NIS+
None
NIS
DNS
LDAP
< Back
Next >

22. Select **Geographic region** and click [**Next**>].

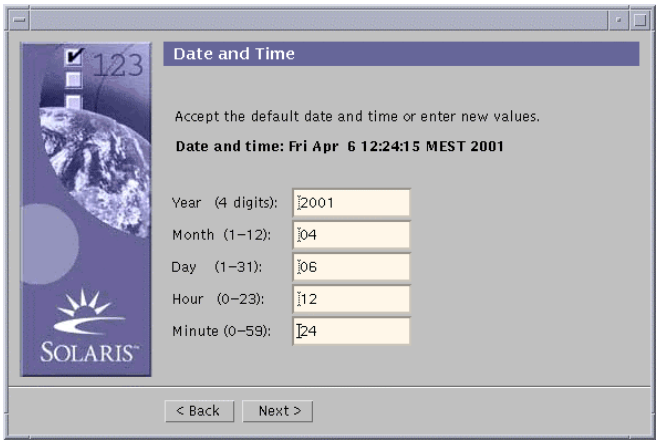

Time Zone
On this screen you must select how to specify your default time zone.
Specify timezone by:
Geographic region
Offset from GMT
Time zone file
< Back
Next >

23. Select your region and click [**Next**>].



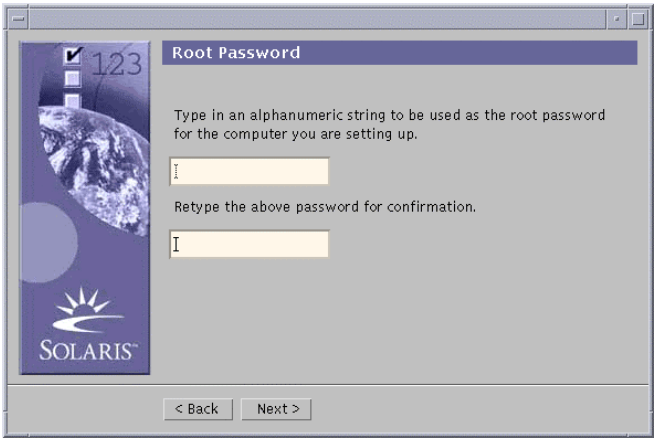
Copyright © 2004 Philips Medical Systems

24. Enter date and time and click [**Next**>].


Date and Time
Accept the default date and time or enter new values.
Date and time: Fri Apr 6 12:24:15 MEST 2001
Year (4 digits): 2001
Month (1-12): 04
Day (1-31): 06
Hour (0-23): 12
Minute (0-59): 24
< Back
Next >

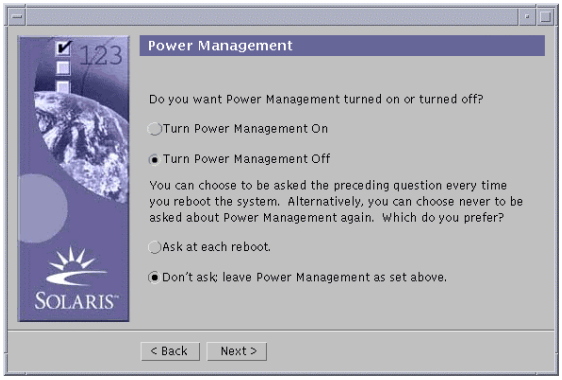
25. Enter : ***password***
Re-enter: ***password***

Click [**Next**>].


Root Password
Type in an alphanumeric string to be used as the root password for the computer you are setting up.
Retype the above password for confirmation.
< Back
Next >

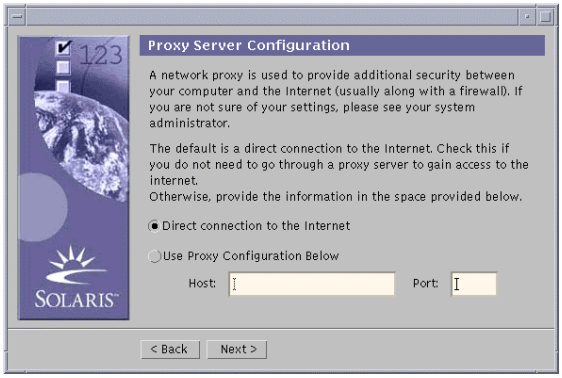
26. Select **Turn Power Management Off**,
select **Don't ask; leave Power Management as set above**

and click [**Next**>].

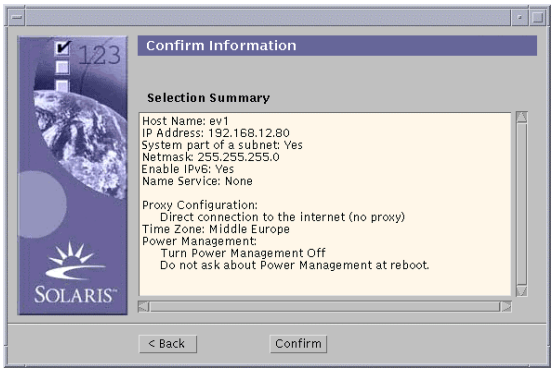

Power Management
Do you want Power Management turned on or turned off?
Turn Power Management On
Turn Power Management Off
You can choose to be asked the preceding question every time you reboot the system. Alternatively, you can choose never to be asked about Power Management again. Which do you prefer?
Ask at each reboot.
Don't ask; leave Power Management as set above.
< Back
Next >

27. Select **Direct connection to the Internet** and click [**Next**>].

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED


Proxy Server Configuration
A network proxy is used to provide additional security between your computer and the Internet (usually along with a firewall). If you are not sure of your settings, please see your system administrator.
The default is a direct connection to the Internet. Check this if you do not need to go through a proxy server to gain access to the internet.
Otherwise, provide the information in the space provided below.
Direct connection to the Internet
Use Proxy Configuration Below
Host:
Port:
< Back
Next >

28. Check the information and click [**Confirm**].



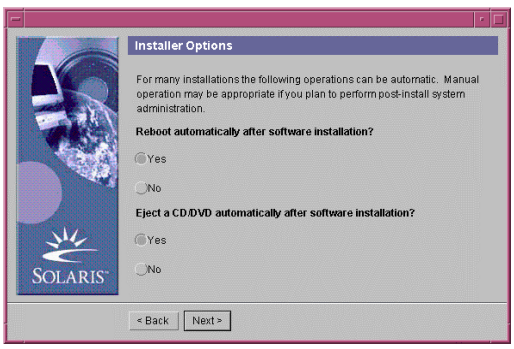
29. When an error message appears: click [***Accept***].

30. After a while the Welcome window appears. Click [**Next**>].

Welcome
Solaris Web Start will assist you in installing software for Solaris
Välkommen till ようこそ Bienvenue à
歓迎 Benvenuti a 환영 Willkommen zu
Bienvenido a 欢迎
Welcome to Solaris
To go to the next screen, click Next.
Next >
Exit

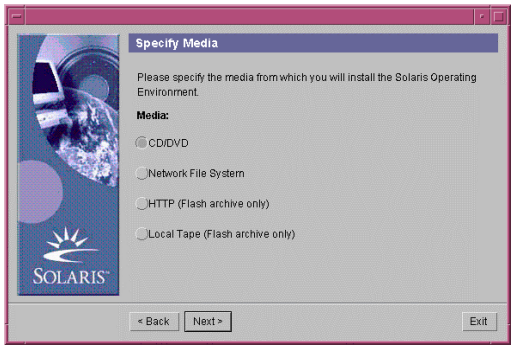
31. Select **Yes** for **Reboot automatically...** ,
select **Yes** for **Eject CD/DVD automatically...**

and click [**Next**>].

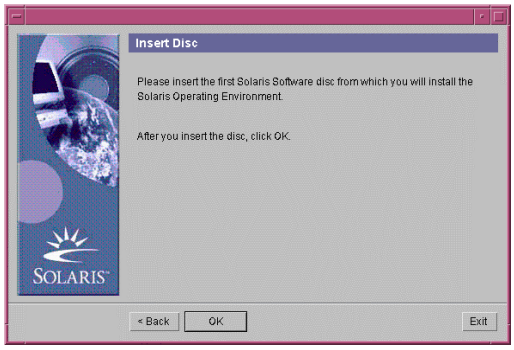

Installer Options
For many installations the following operations can be automatic. Manual operation may be appropriate if you plan to perform post-install system administration.
Reboot automatically after software installation?
Yes
No
Eject a CD/DVD automatically after software installation?
Yes
No
< Back
Next >

Copyright © 2004 Philips Medical Systems

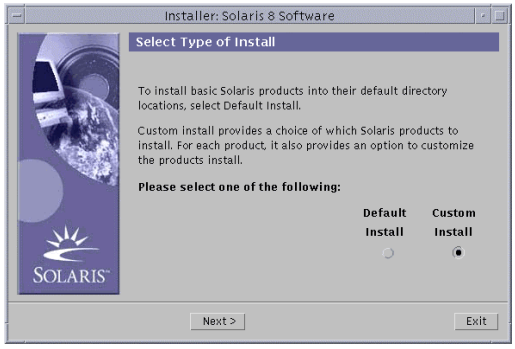
32. Select **CD/DVD** and click [**Next**>].



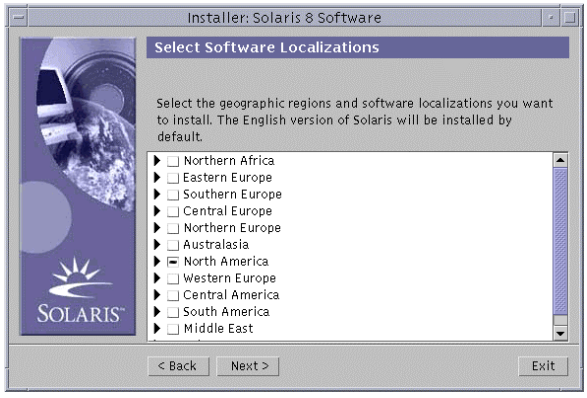
33. Insert the CD **Solaris 8 Software 1of 2** and click [**OK**].


Insert Disc
Please insert the first Solaris Software disc from which you will install the Solaris Operating Environment.
After you insert the disc, click OK.
SOLARIS
< Back
OK
Exit

34. After initialization the following window appears. Select **Custom install** and click [**Next**>].

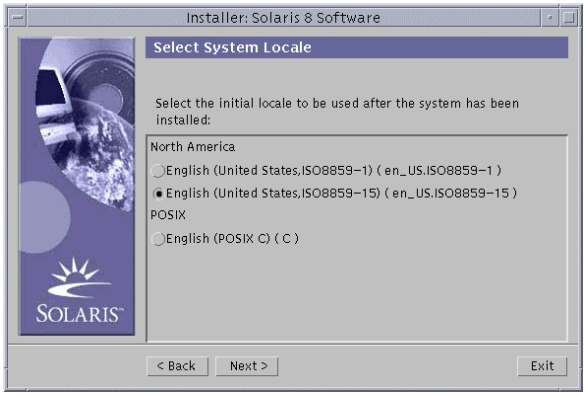

Installer: Solaris 8 Software
Select Type of Install
To install basic Solaris products into their default directory locations, select Default Install.
Custom install provides a choice of which Solaris products to install. For each product, it also provides an option to customize the products install.
Please select one of the following:
Default Install
Custom Install
SOLARIS
Next >
Exit

35. Select **North America** and click [**Next**>].

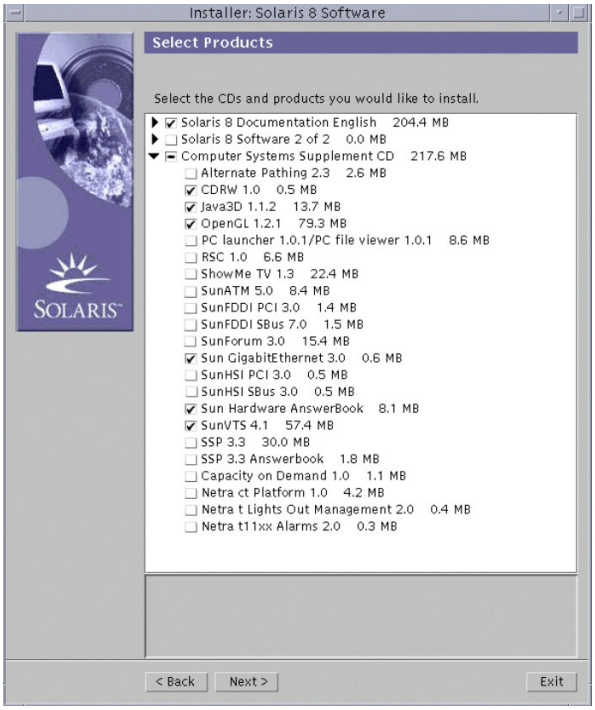


36. Select **English (United States, ISO8859-15)** and click [**Next**>].

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED


Installer: Solaris 8 Software
Select System Locale
Select the initial locale to be used after the system has been installed:
North America
English (United States,ISO8859-1) (en_US.ISO8859-1)
English (United States,ISO8859-15) (en_US.ISO8859-15)
POSIX
English (POSIX C) (C)
SOLARIS
< Back
Next >
Exit

37. Open **Computer Systems Supplement CD**

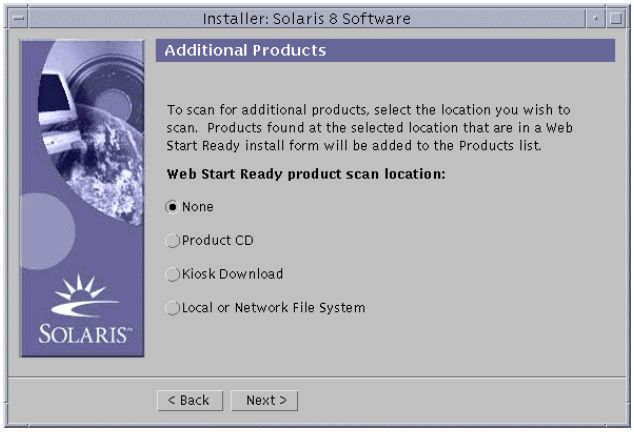

Installer: Solaris 8 Software
Select Products
Select the CDs and products you would like to install.
Solaris 8 Documentation English 204.4 MB
Solaris 8 Software 2 of 2 0.0 MB
Computer Systems Supplement CD 217.6 MB
Alternate Pathing 2.3 2.6 MB
CDRW 1.0 0.5 MB
Java3D 1.1.2 13.7 MB
OpenGL 1.2.1 79.3 MB
PC launcher 1.0.1/PC file viewer 1.0.1 8.6 MB
RSC 1.0 6.6 MB
ShowMe TV 1.3 22.4 MB
SunATM 5.0 8.4 MB
SunFDDI PCI 3.0 1.4 MB
SunFDDI SBus 7.0 1.5 MB
SunForum 3.0 15.4 MB
Sun GigabitEthernet 3.0 0.6 MB
SunHSI PCI 3.0 0.5 MB
SunHSI SBus 3.0 0.5 MB
Sun Hardware AnswerBook 8.1 MB
SunVTS 4.1 57.4 MB
SSP 3.3 30.0 MB
SSP 3.3 Answerbook 1.8 MB
Capacity on Demand 1.0 1.1 MB
Netra ct Platform 1.0 4.2 MB
Netra t Lights Out Management 2.0 0.4 MB
Netra t11xx Alarms 2.0 0.3 MB
SOLARIS
< Back
Next >
Exit

Un-check **PC launcher 1.0.1/PC file viewer 1.0.1**
RSC 2.2
ShowMe TV 1.3
SunATM5.0
SunFDDI PCI 3.0
SunFDDI Sbus 7.0
SunForum 3.1
SunHSI PCI 3.0
SunHSI Sbus 3.0

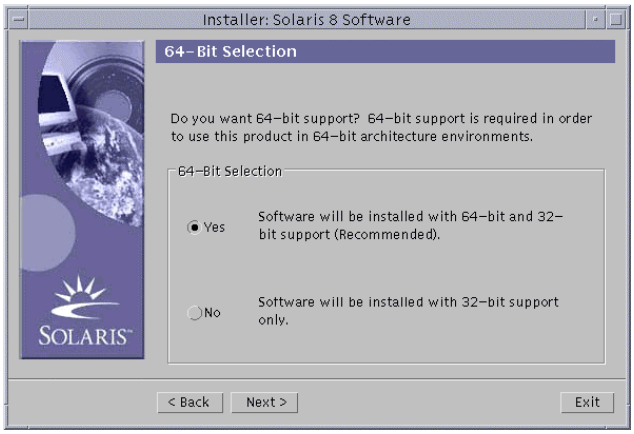
Click [**Next**>].

38. Select **None** and click [**Next**>].

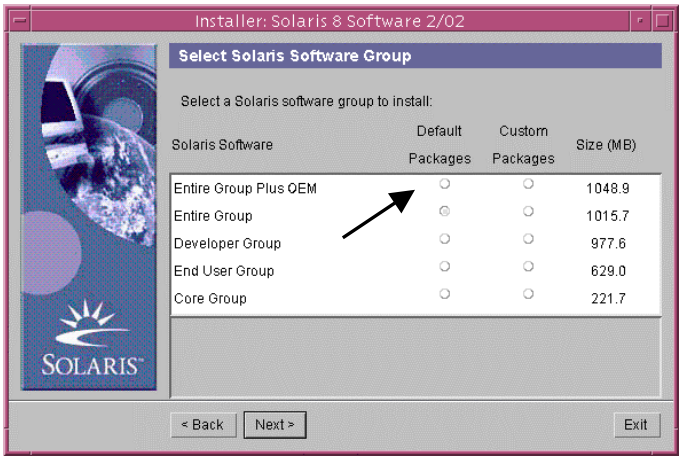
Copyright © 2004 Philips Medical Systems


Installer: Solaris 8 Software
Additional Products
To scan for additional products, select the location you wish to scan. Products found at the selected location that are in a Web Start Ready install form will be added to the Products list.
Web Start Ready product scan location:
None
Product CD
Kiosk Download
Local or Network File System
SOLARIS
< Back
Next >

39. The following window does not appear on **SunBlade** systems. Select **Yes** and click [**Next**>].


Installer: Solaris 8 Software
64-Bit Selection
Do you want 64-bit support? 64-bit support is required in order to use this product in 64-bit architecture environments.
64-Bit Selection
Yes
Software will be installed with 64-bit and 32-bit support (Recommended).
No
Software will be installed with 32-bit support only.
SOLARIS
< Back
Next >
Exit

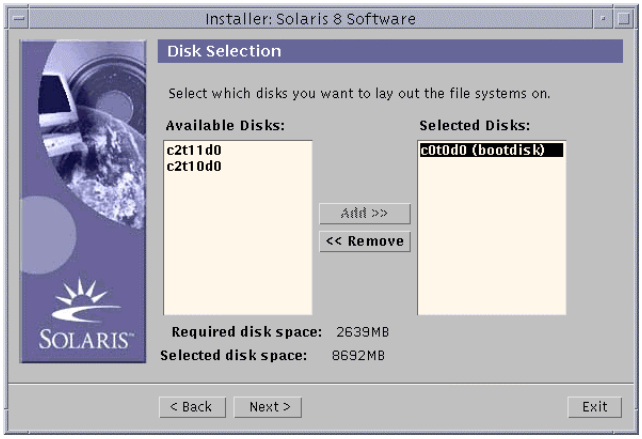
40. Select **Default Packages** for **Entire Group** and click [**Next**>].



> ***Note***
> This list may look differently on your system.

41. Selected disk**: c0t0d0 (bootdisk).**

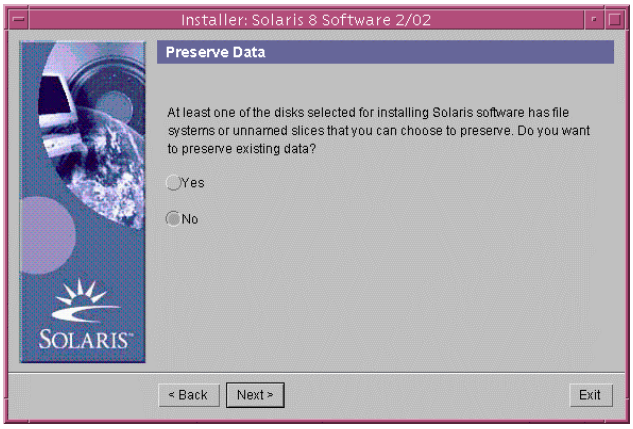
Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED



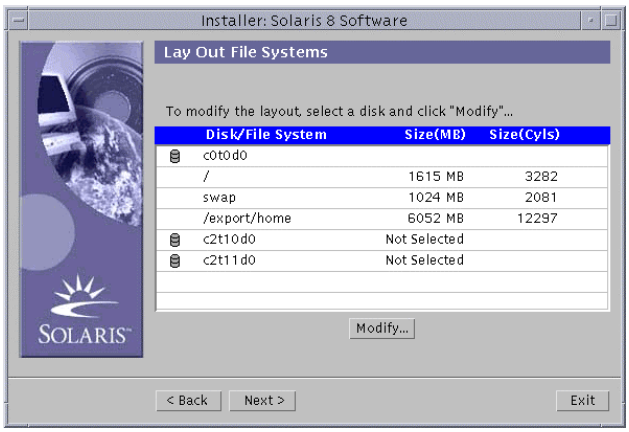
Note: The other disks are image disks; these are not available on a Workspot. The indicated amount of selected diskspace depends on the hardware configuration.

Click [**Next**>].

42. Click **No** and click [**Next**>].


Installer: Solaris 8 Software 2/02
Preserve Data
At least one of the disks selected for installing Solaris software has file systems or unnamed slices that you can choose to preserve. Do you want to preserve existing data?
Yes
No
< Back
Next >
Exit

43. After a while the following panel appears:



> ***Note***
> This list may look differently on your system.

Select disk **c0t0d0** and click [**Modify...**].

44. Delete the contents (/export/home) of the fields **File System** and **Size** for **Slice 7**.

Copyright © 2004 Philips Medical Systems

45. For hard disks of a size of 4GB or smaller enter

Slice	File System	Size	
0	/	nnnn MB	for ***nnnn*** use the remaining size (Free) of the disk.

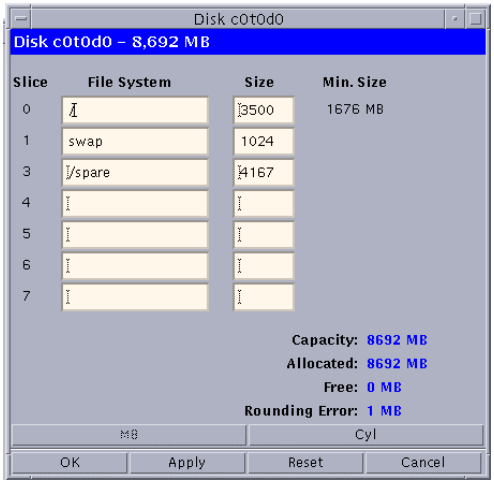
For hard disks greater 4GB (e.g. 8GB) enter

Slice	File System	Size	
0	/	3500 MB	
3	/spare	xxxx MB	for ***nnnn*** use the remaining size (Free) of the disk

“Free” may not be negative, “Free” must be at least 0 MB!

NOTE

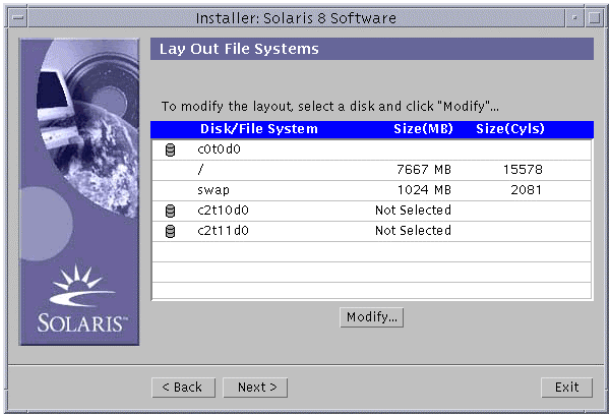
*Due to rounding aspects the swap size may be changed afterwards by the system e.g. to 1026 MB. Reduce /**spare** until “Free” is positive.*



NOTE
When "Cyl" is displayed instead of "MB" :
Click [**MB**].

46. Click [**OK**].

47. Click [**Next**>].

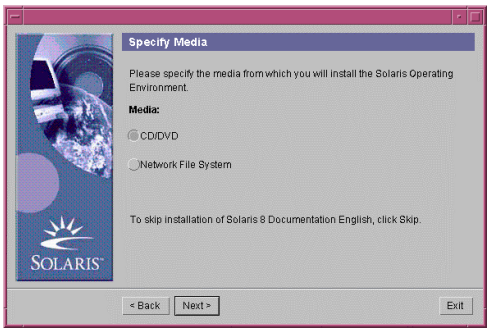


48. Click [**Install now**].

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

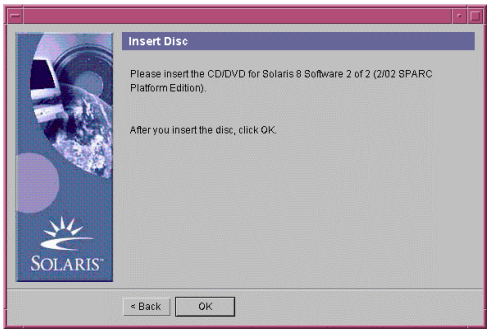
Installer: Solaris 8 Software
Ready to Install
The following items will be installed:
Solaris Operating Environment: Solaris 8 Software
Solaris Software Group: Entire Solaris Software Group
64-Bit Selection: Yes
Region and Locales:
North America
English (United States) (en_US)
English (POSIX C) (C)
System Locale: English (United States,ISO8859-15) (en_US.ISO8859-15)

49. About 15 to 30 minutes later the following panel appears.

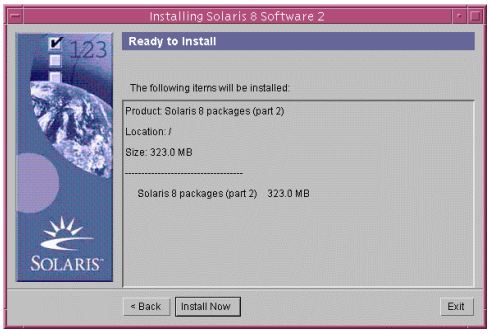

Specify Media
Please specify the media from which you will install the Solaris Operating Environment.
Media:
CD/DVD
Network File System
To skip installation of Solaris 8 Documentation English, click Skip.
SOLARIS
< Back
Next >
Exit

Select **CD/DVD** and click [**Next**>].

50. Insert CD **Solaris 8 Software 2 of 2** and click [**OK**].

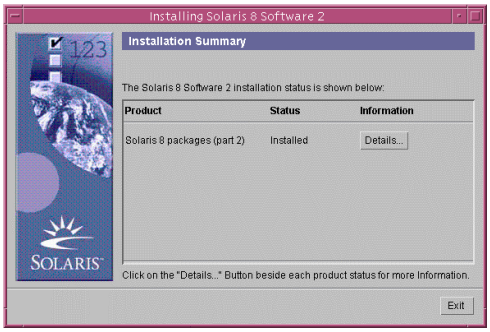

Insert Disc
Please insert the CD/DVD for Solaris 8 Software 2 of 2 (2/02 SPARC Platform Edition).
After you insert the disc, click OK.
SOLARIS
< Back
OK

51. Click [**Install Now**].

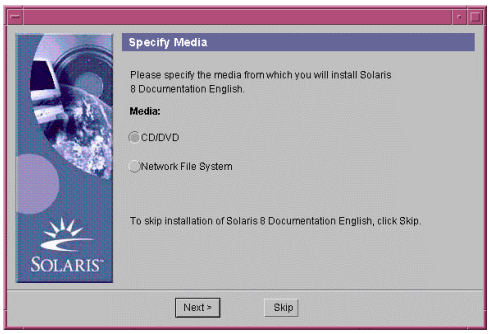


52. About 10 minutes later the following panel appears. Click [**Exit**].

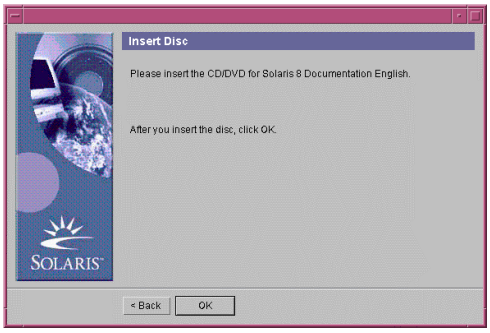
Copyright © 2004 Philips Medical Systems



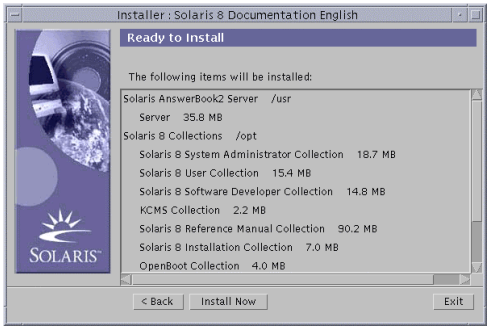
53. Select **CD/DVD** and click [**Next**>].


Specify Media
Please specify the media from which you will install Solaris 8 Documentation English.
Media:
CD/DVD
Network File System
To skip installation of Solaris 8 Documentation English, click Skip.
Next >
Skip

54. Insert CD **Documentation** and click [**OK**].

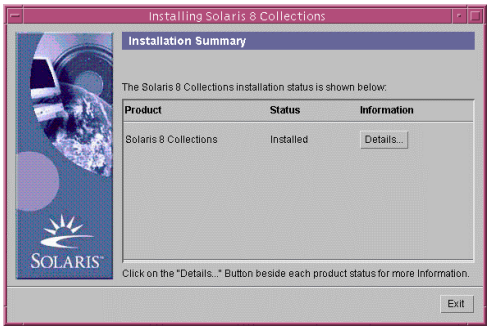


55. Click [**Install now**].


Installer : Solaris 8 Documentation English
Ready to Install
The following items will be installed:
Solaris AnswerBook2 Server /usr
Server 35.8 MB
Solaris 8 Collections /opt
Solaris 8 System Administrator Collection 18.7 MB
Solaris 8 User Collection 15.4 MB
Solaris 8 Software Developer Collection 14.8 MB
KCMS Collection 2.2 MB
Solaris 8 Reference Manual Collection 90.2 MB
Solaris 8 Installation Collection 7.0 MB
OpenBoot Collection 4.0 MB
< Back
Install Now
Exit

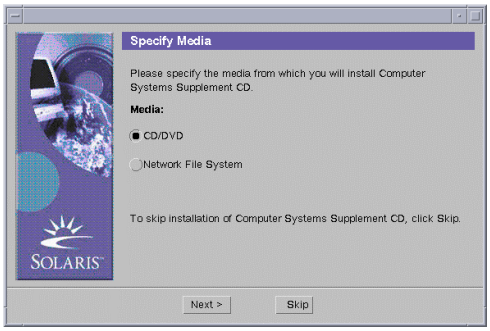
56. About 10 minutes later the following panel appears. Click [**Exit**].

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

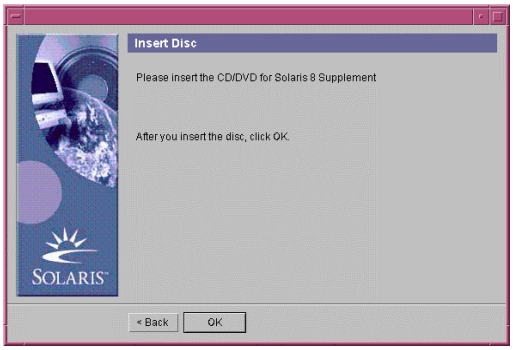


57. The system reboots automatically.

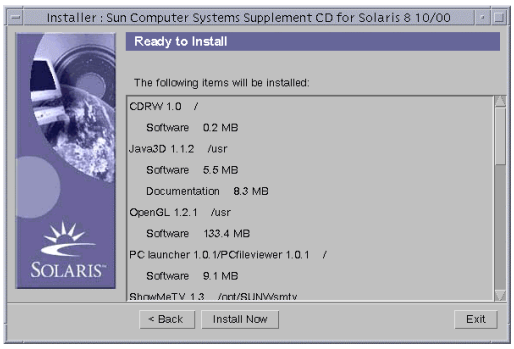
58. After rebooting the system the following window appears. Select **CD/DVD** and click [**Next**>].



59. Insert the CD **Software Supplement** and click [**OK**].

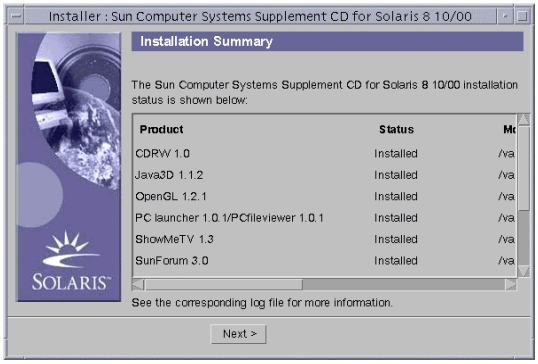


60. After a while the following panel appears. Click [**Install now**].



61. About 5 minutes later the following panel appears.

Copyright © 2004 Philips Medical Systems



Click [**Next**>] then remove the CD from the drive.

62. The system reboots automatically.

63. If not already done: re-connect the network cable.

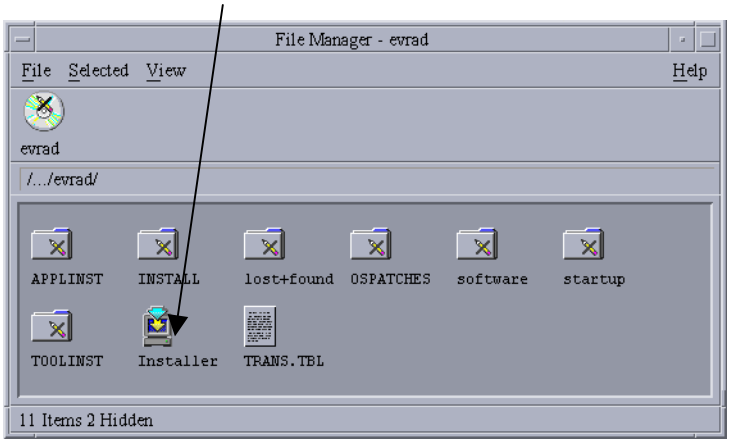
64. This completes the installation of the operating system. **Proceed with installing the application software in chapter 4.1.2**.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

4.1.2 Installing the application software

Login as user: ***root***
Password: ***password***

1. Insert the CD **Application Software**. Wait until the CD-ROM file manager appears.
2. Double-click **Installer.**



3. Enter ***Y***.

```
....
That amount will do fine for this installation

Do you want to install the EasyVision Application [y/n] (n)
```

4. Answer accordingly:

```
Please specify the kind of monitor you have.

Enter 1 for a CRT monitor
Enter 2 for a LCD monitor
Your choice:
```

5. Enter ***Y***.

```
...
Disk c1t11d0 appears to be a previous image disk for this system.
.
Do you want to re-use it as image disk (y/n).
```

6. When installing the application software is done, press <**Enter**> to reboot.
   While the EasyVision is rebooting remove the CD from the drive.

```
License file restored from /dbadmin
To activate the just installed EasyVision software, the system
must be rebooted now.
When the system is up again, you need to Configure the system.

Press enter to start the reboot..
```

7. When a Dome Md2 graphics card is installed: Connect the monitor cable to the Md2 card.

Copyright © 2004 Philips Medical Systems

8. After rebooting the system the following screen appears.

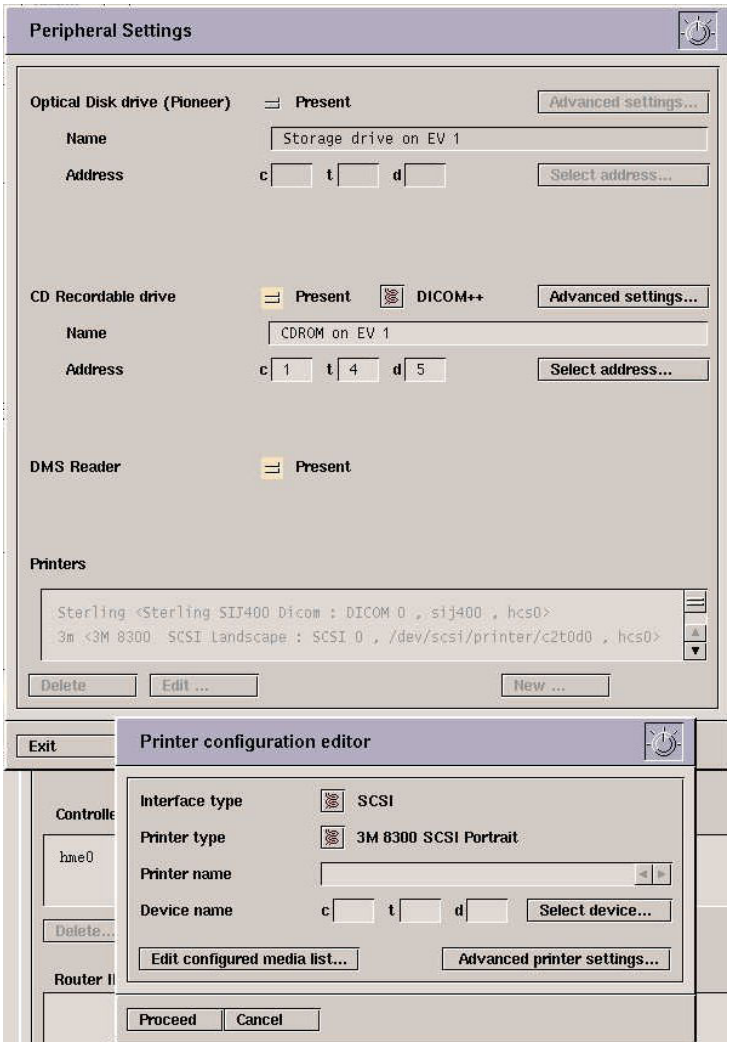
```
Config Menu: What do you want to do?

        1. Start Configuration
        2. Reinstall Application
        3. Login as root
        4. Install License File from diskette
        5. Install License File from CD

        0 Shutdown
```

   Select **1. Start Configuration**.

   Starting the configuration program takes about 30 seconds.

9. If there is a DOR, a CD-R drive or a SCSI printer connected to the system their SCSI addresses need to be configured under **Peripheral Settings**.
   - Edit the configuration of the EasyVision
   - Click [**Peripheral Settings**].

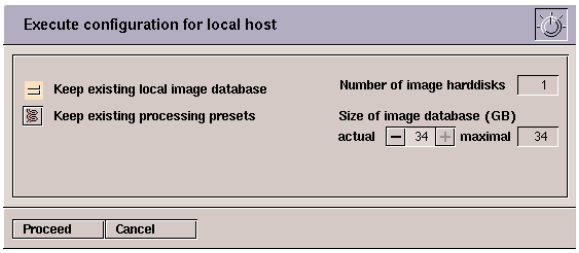
   For present DOR or CD-R drive:
   - Click [**Present**].
   - Click [**Select address**]
   - Select the device from the list and click [**Proceed**].



10. Click [**Execute...**] to make changes effective and to update the Setup Database.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

11. Before execution starts this panel is displayed.



12. Click [**Proceed**].

13. When done, the system performs a reboot.

14. Updating the software is now done and the system is operational.

4.1.3 Configuring new printers

New supported printers may not show up automatically in the list of supported printers when updating the EasyVision. To be able to select these printers in the configuration the following step must be done.

- Start configuration.
- **Edit** the configuration of the EV.
- Click **[Peripheral settings]**.
- Click [**New**].
- Click [**Advanced printer setting**].
- Click [**Edit printer list**].
- Click [**Reset printer list**].

The printers are now available.

Copyright © 2004 Philips Medical Systems

4.2 Updating Level 4 or 5 to Level 6

This chapter describes the necessary procedures to update an EasyVision RAD R 4.2 Level 5 system to Level 6.

1. From the Start-Up menu select **4 Installation**:

```
1. Start Application
2. Start Customization
3. Go to Service Menu
4. Go to Installation/Configuration Menu

0. Shutdown
```

2. Select option **1 Install Application** :

```
Installation/Configuration Menu:

1. Install Application
2. Start Configuration
3. Change IP address
4. Change System's Date and Time
0. Return to Startup Menu
```

3. Select option **1 Install Application** :

```
   Application Install Menu:

   What do you want to do?:
      1 Install Application
      2 Login as root

      0 Shutdown
```

4. Enter ***password***.

```
Starting installation
Password:
```

5. Insert the CD **Application Software** into the CD-ROM drive and press <**Enter**>.

```
Welcome to the Application installation utility for EASYVISION

Insert the distribution CD-ROM containing the Application software and press Return to continue:
```

6. Enter <**Y**>.

```
Do you want to install the EasyVision application?  [y/n]
```

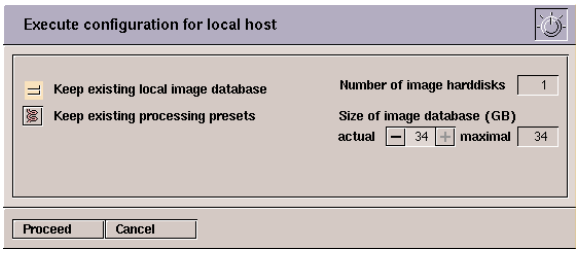
7. After about 5 minutes the software installation is completed and the following panel appears:
   Select **1. Start Configuration**.

```
Config Menu:

What do you want to do?
   1. Start Configuration
   2. Reinstall Application
   3. Login as root
   4. Install License File from diskette
   5. Install License File from CD


   0 Shutdown
```

8. Click [**Execute...**] to make changes effective and to update the Setup Database.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

9. Before execution starts this panel is displayed.



10. Click [**Proceed**].

11. When done, the system performs a reboot. **While rebooting remove the CD from the drive.**

12. Updating the software is now done and the system is operational.

4.2.1 Configuring new printers

The new supported printers may not show up automatically in the list of supported printers when updating the EasyVision. To be able to select these printers in the configuration the following step must be done.

- Start configuration.
- **Edit** the configuration of the EV.
- Click **[Peripheral settings]**.
- Click [**New**].
- Click [**Advanced printer setting**].
- Click [**Edit printer list**].
- Click [**Reset printer list**].

The printers are now available.

Copyright © 2004 Philips Medical Systems

5 RE-INSTALLING THE SOFTWARE

5.1 Introduction

This chapter describes the necessary procedures to re-install R4.2 L6 software when R4.2 L6 software was previously installed.

There are chapters for re-installing the operating system and for re-installing the application software. Proceed with them as needed:

- Re-installing the operating system
  - Power on
  - Go to OK prompt
  - Boot from CD-ROM/DVD
  - Install Solaris 8 using the Sun CDs/DVD (chapter **Re-installing the operating system from CD**) or DVDs (**Re-installing the operating system from DVD**).

- Re-installing the application software

NOTE

*In case of updating the EasyVision from a former release please refer to chapter **4*** UPDATING to Release 4.2 L6 *before installing the software.*

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

5.2 Re-installing the operating system from CD

This chapter describes the necessary procedures to re-install the operating system when the software was previously installed or when a system disk has to be replaced and the operating system must be re-installed.

During the Solaris installation on a system with a **DOME MD2 grayscale card** installed, the monitor must be connected to the on-board adaptor or to the true-color card so that a full color screen is used. The presence of the DOME MD2 card will be detected during the installation of the application software: a question whether this card will be used, as the EasyVision display controller has to be confirmed then. At the next reboot the monitor must be connected to the MD2 card.

CD-ROMs needed:

Solaris 8 - Installation
Software 1 of 2
Software 2 of 2
Documentation
Software Supplement

1. For systems with a **Dome Md2** grayscale card:
   Connect the monitor to the on-board graphics adaptor.
   At the ***ok*** prompt enter ***setenv output-device screen***.

2. Disconnect the network cable from the network.

3. Insert the CD **Solaris 8 Installation.**

4. At the **ok** prompt enter : ***boot cdrom***

5. After some system messages, the following question appears:

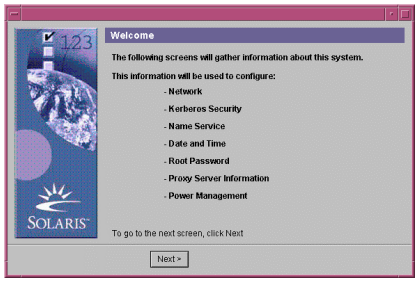
```
...

The disk slice, c0t0d0s1, labeled as swap, is large enough to hold the Solaris
installation software.

NOTE: All information on the selected swap slice will be erased.

Can c0t0d0s1 be used for the Solaris installation software [y,n,?,q] y
```

   Enter: ***Y***

6. Files are being copied. This may take up to **10 minutes**. When done, the system reboots automatically.

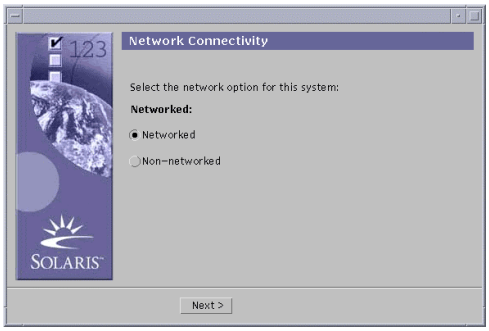
```
...
After the files are copied, the system will reboot, and the installation will
continue.
Please Wait...

Copying mini-root to local disk.
```

7. After a while the Welcome window appears :
   Click [**Next**>].



Copyright © 2004 Philips Medical Systems

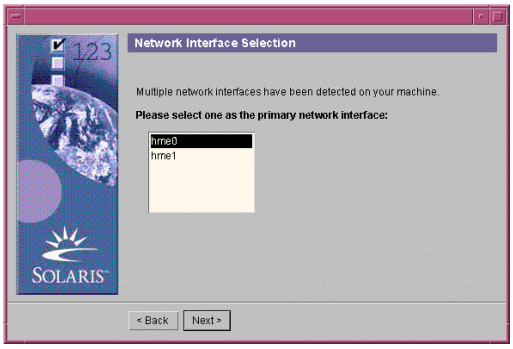
8. Select **Networked** and click [**Next**>].



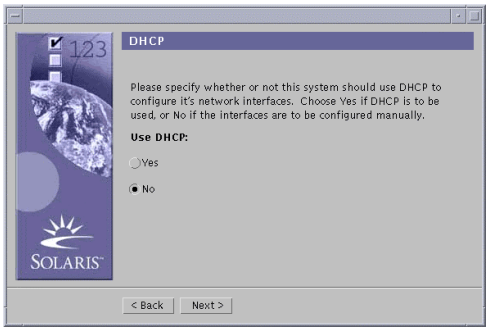
9. When there are **more than one network adaptors** installed in the system the following window **may** appear. If not, go to step 10.

   For an Ultra 10 or 60 select **hme0**,
   for a SunBlade 1000/2000 select **eri0,**
   for a SunBlade 1500 select **bge0, ge or ce,** depending on the delivered network card.

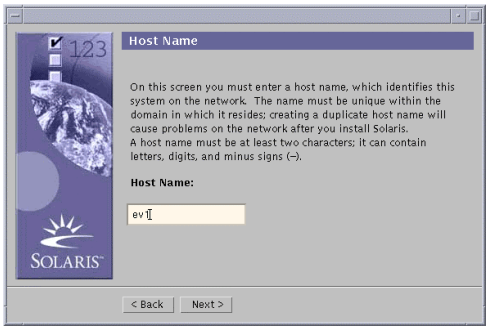
   Click [**Next**>].



10. Select **No** and click [**Next**>].


DHCP
Please specify whether or not this system should use DHCP to configure it's network interfaces. Choose Yes if DHCP is to be used, or No if the interfaces are to be configured manually.
Use DHCP:
Yes
No
< Back
Next >
SOLARIS

11. Enter the host name (e.g. ev1) and click [**Next**>].


Host Name
On this screen you must enter a host name, which identifies this system on the network. The name must be unique within the domain in which it resides; creating a duplicate host name will cause problems on the network after you install Solaris.
A host name must be at least two characters; it can contain letters, digits, and minus signs (-).
Host Name:
ev1
< Back
Next >
SOLARIS

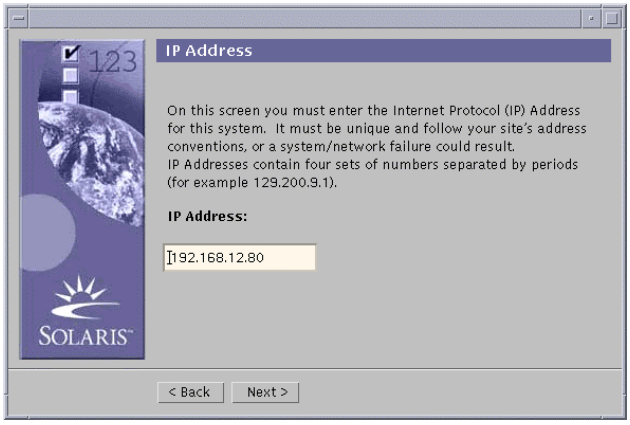
Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

NOTE

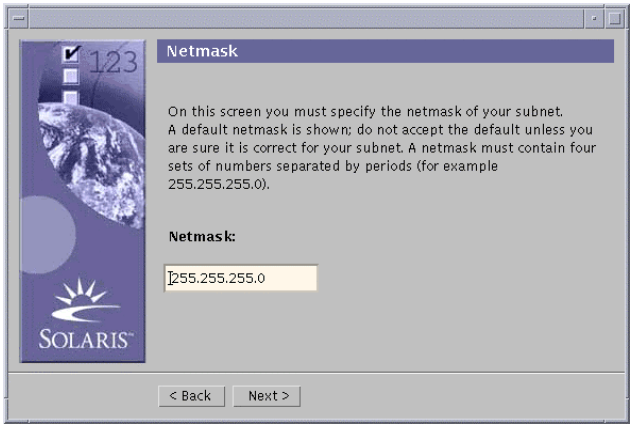
Solaris 8 installation procedure does not accept underscores "_" in the host name. Therefore do not use underscores in above panel. When you want to use underscores anyway (e.g. in case of upgrading a system which was already defined in the network with a host name including underscores), you can define the IP Node Name (incl. underscores) of the EasyVision in the config main panel. This way you do not have to reconfigure the IP Node Name on other systems that are addressing this EasyVision.

---

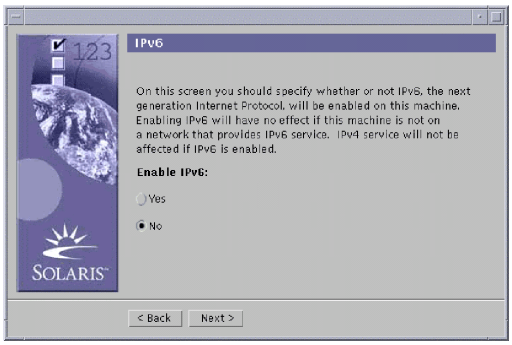
12. Enter the IP address and click [**Next**>].


IP Address
On this screen you must enter the Internet Protocol (IP) Address for this system. It must be unique and follow your site's address conventions, or a system/network failure could result.
IP Addresses contain four sets of numbers separated by periods (for example 129.200.9.1).
IP Address:
192.168.12.80
SOLARIS
< Back
Next >

13. Verify the netmask and click [**Next**>].

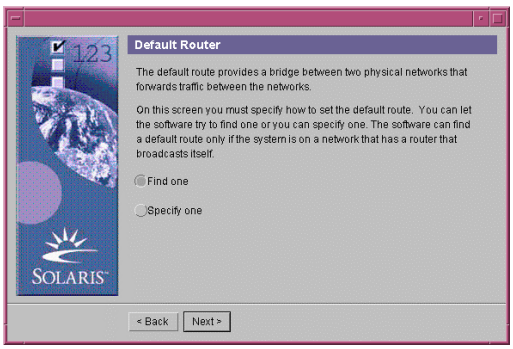

Netmask
On this screen you must specify the netmask of your subnet.
A default netmask is shown; do not accept the default unless you are sure it is correct for your subnet. A netmask must contain four sets of numbers separated by periods (for example 255.255.255.0).
Netmask:
255.255.255.0
SOLARIS
< Back
Next >

14. Select **No** and click [**Next**>].

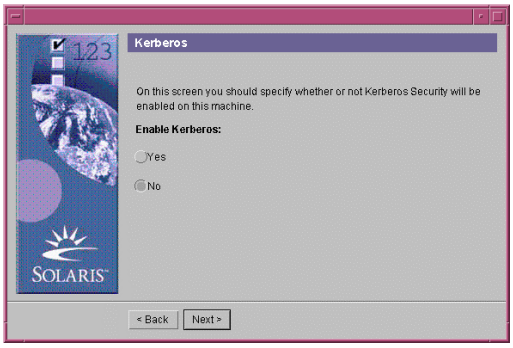

IPv6
On this screen you should specify whether or not IPv6, the next generation Internet Protocol, will be enabled on this machine. Enabling IPv6 will have no effect if this machine is not on a network that provides IPv6 service. IPv4 service will not be affected if IPv6 is enabled.
Enable IPv6:
Yes
No
SOLARIS
< Back
Next >

15. Select **Find one** and click [**Next**>].

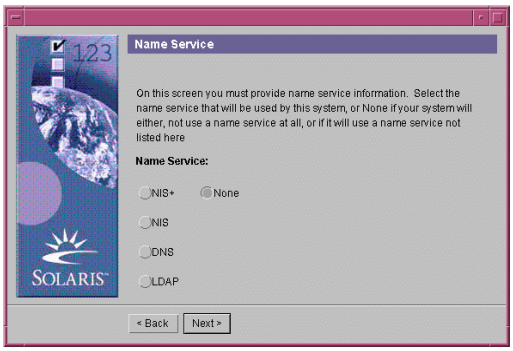
Copyright © 2004 Philips Medical Systems


Default Router
The default route provides a bridge between two physical networks that forwards traffic between the networks.
On this screen you must specify how to set the default route. You can let the software try to find one or you can specify one. The software can find a default route only if the system is on a network that has a router that broadcasts itself.
Find one
Specify one
< Back
Next >

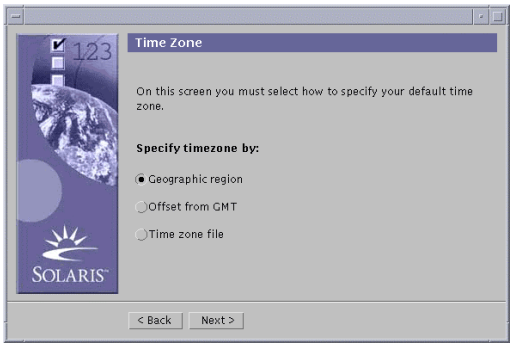
16. Select **No** and click [**Next**>].


Kerberos
On this screen you should specify whether or not Kerberos Security will be enabled on this machine.
Enable Kerberos:
Yes
No
< Back
Next >

17. Select **None** and click [**Next**>].

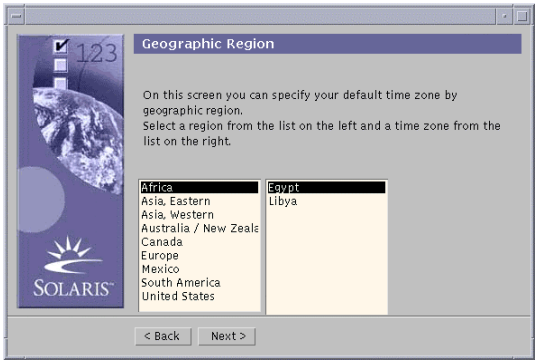

Name Service
On this screen you must provide name service information. Select the name service that will be used by this system, or None if your system will either, not use a name service at all, or if it will use a name service not listed here
Name Service:
NIS+
None
NIS
DNS
LDAP
< Back
Next >

18. Select **Geographic region** and click [**Next**>].

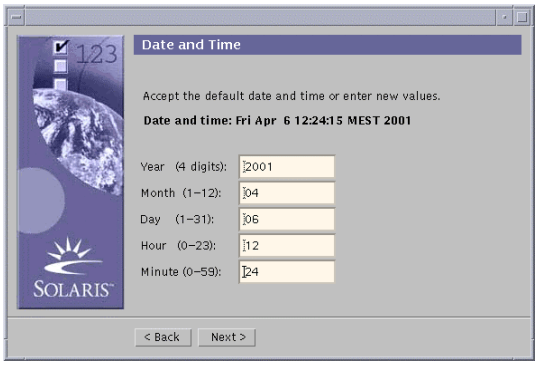

Time Zone
On this screen you must select how to specify your default time zone.
Specify timezone by:
Geographic region
Offset from GMT
Time zone file
< Back
Next >

19. Select your region and click [**Next**>].

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

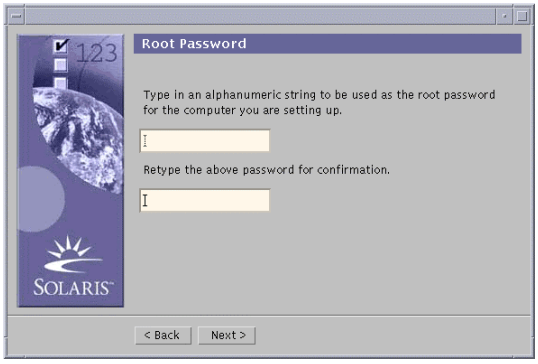


20. Enter date and time and click [**Next**>].

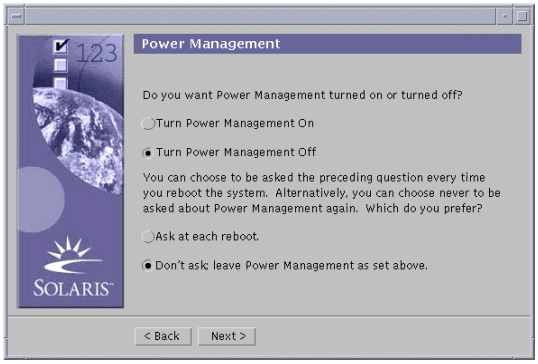

Date and Time
Accept the default date and time or enter new values.
Date and time: Fri Apr 6 12:24:15 MEST 2001
Year (4 digits): 2001
Month (1–12): 04
Day (1–31): 06
Hour (0–23): 12
Minute (0–59): 24
< Back
Next >

21. Enter : password
    Re-enter: password

    Click [**Next**>].

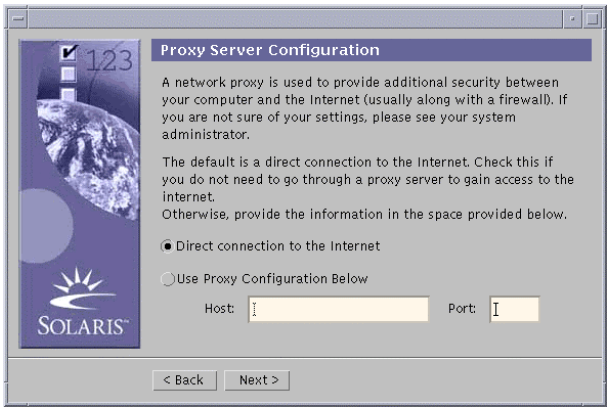

Root Password
Type in an alphanumeric string to be used as the root password for the computer you are setting up.
Retype the above password for confirmation.
< Back
Next >

22. Select **Turn Power Management Off**,
    select **Don't ask; leave Power Management as set above**
    and click [**Next**>].

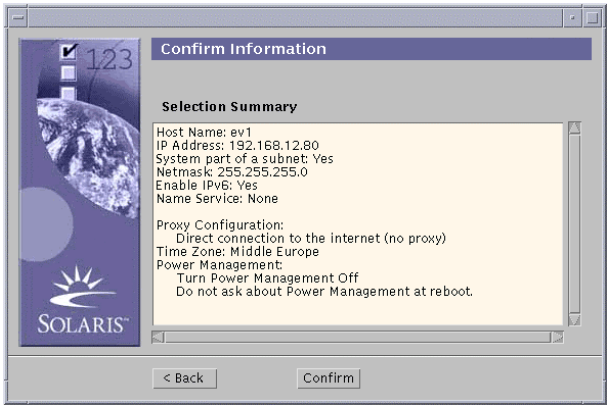

Power Management
Do you want Power Management turned on or turned off?
Turn Power Management On
Turn Power Management Off
You can choose to be asked the preceding question every time you reboot the system. Alternatively, you can choose never to be asked about Power Management again. Which do you prefer?
Ask at each reboot.
Don't ask; leave Power Management as set above.
< Back
Next >

Copyright © 2004 Philips Medical Systems

23. Select **Direct connection to the Internet** and click [**Next**>].


Proxy Server Configuration
A network proxy is used to provide additional security between your computer and the Internet (usually along with a firewall). If you are not sure of your settings, please see your system administrator.
The default is a direct connection to the Internet. Check this if you do not need to go through a proxy server to gain access to the internet.
Otherwise, provide the information in the space provided below.
Direct connection to the Internet
Use Proxy Configuration Below
Host:
Port:
< Back
Next >

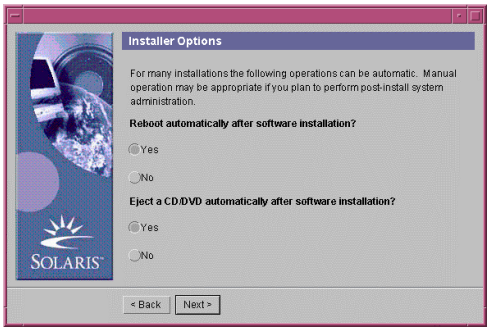
24. Check the information and click [**Confirm**].



25. After a while the Welcome window appears. Click [**Next**>].

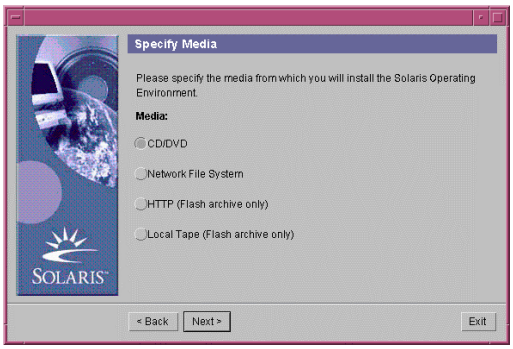
26. Select **Yes** for **Reboot automatically...** ,
select **Yes** for **Eject CD/DVD automatically...**

and click [**Next**>].

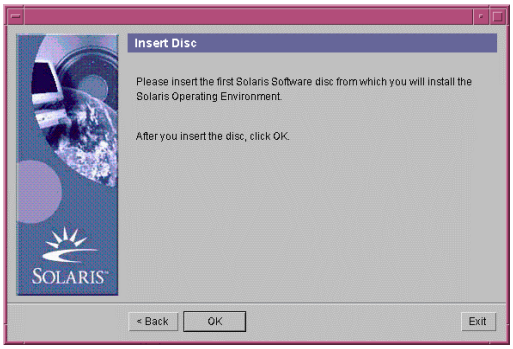

Installer Options
For many installations the following operations can be automatic. Manual operation may be appropriate if you plan to perform post-install system administration.
Reboot automatically after software installation?
Yes
No
Eject a CD/DVD automatically after software installation?
Yes
No
< Back
Next >

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

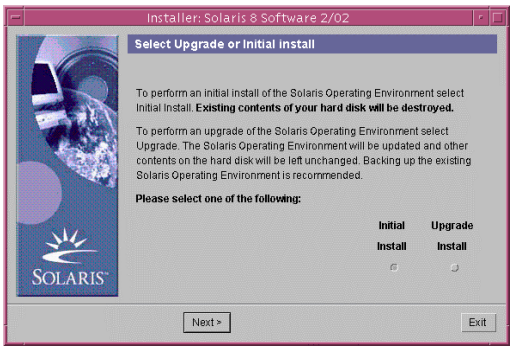
27. Select **CD/DVD** and click [**Next**>].



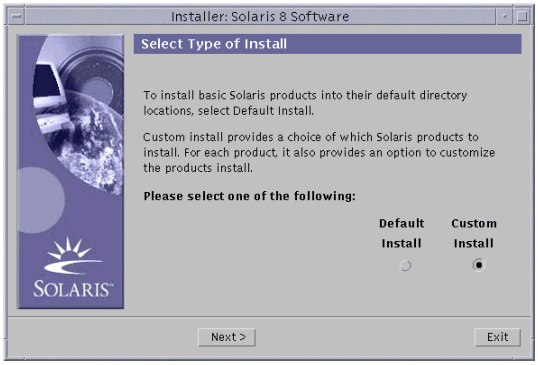
28. Insert the CD **Solaris 8 Software 1of 2** and click [**OK**].


Insert Disc
Please insert the first Solaris Software disc from which you will install the Solaris Operating Environment.
After you insert the disc, click OK.
SOLARIS
< Back
OK
Exit

29. Select **Initial Install** and click [**Next**>].

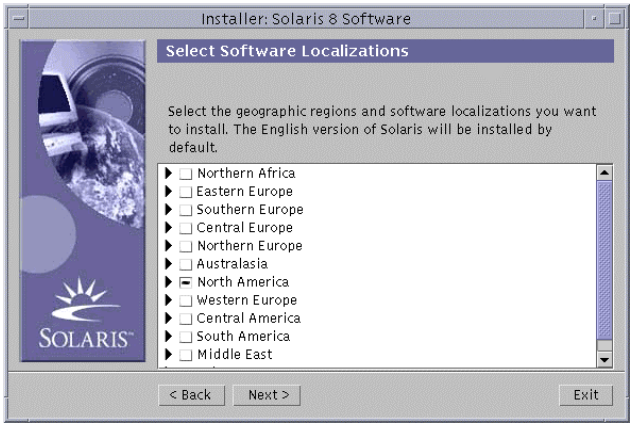

Installer: Solaris 8 Software 2/02
Select Upgrade or Initial Install
To perform an initial install of the Solaris Operating Environment select Initial Install. Existing contents of your hard disk will be destroyed.
To perform an upgrade of the Solaris Operating Environment select Upgrade. The Solaris Operating Environment will be updated and other contents on the hard disk will be left unchanged. Backing up the existing Solaris Operating Environment is recommended.
Please select one of the following:
Initial Install
Upgrade Install
SOLARIS
Next >
Exit

30. After initialization the following window appears. Select **Custom install** and click [**Next**>].

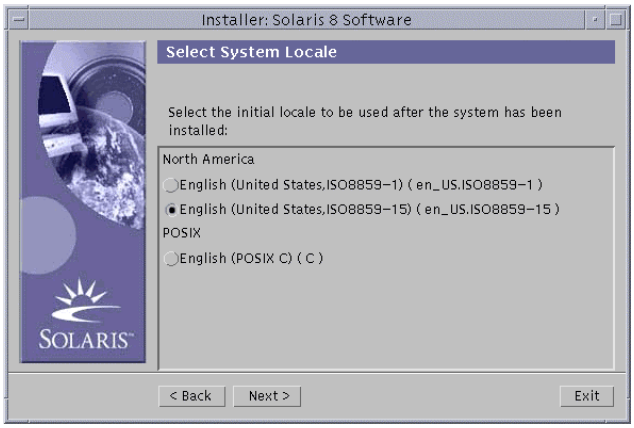

Installer: Solaris 8 Software
Select Type of Install
To install basic Solaris products into their default directory locations, select Default Install.
Custom install provides a choice of which Solaris products to install. For each product, it also provides an option to customize the products install.
Please select one of the following:
Default Install
Custom Install
SOLARIS
Next >
Exit

31. Select **North America** and click [**Next**>].

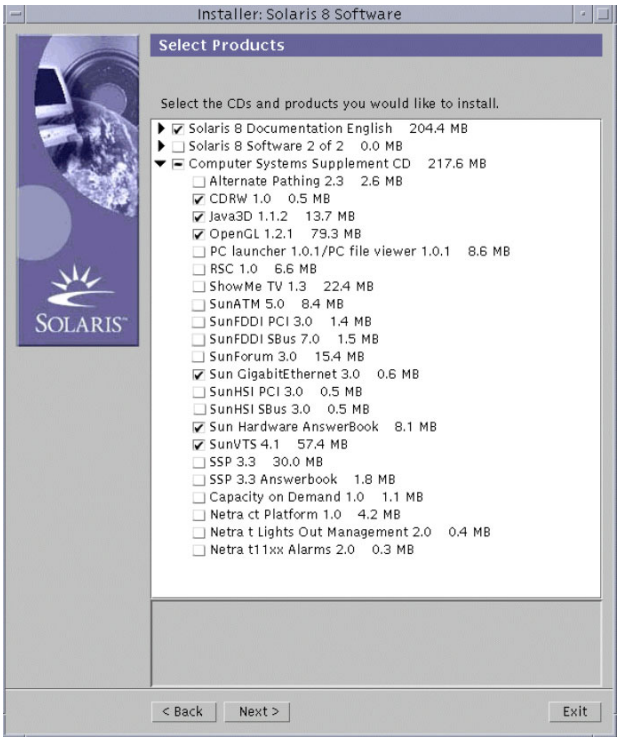
Copyright © 2004 Philips Medical Systems



32. Select **English (United States,ISO8859-15)** and click [**Next**>].


Installer: Solaris 8 Software
Select System Locale
Select the initial locale to be used after the system has been installed:
North America
English (United States,ISO8859-1) (en_US.ISO8859-1)
English (United States,ISO8859-15) (en_US.ISO8859-15)
POSIX
English (POSIX C) (C)
< Back
Next >
Exit

33. Open **Computer Systems Supplement CD**

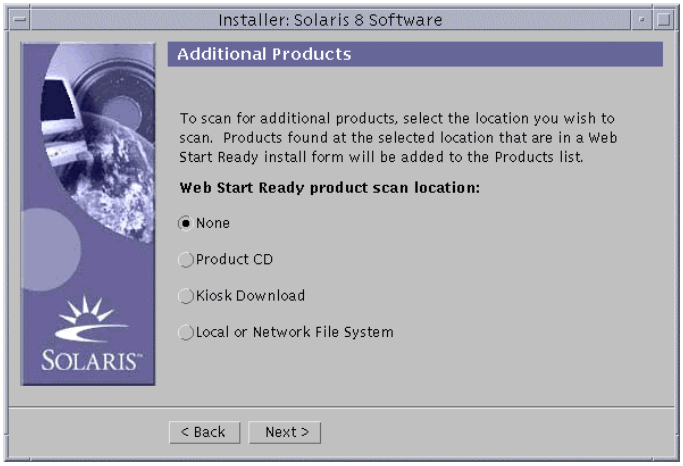

Installer: Solaris 8 Software
Select Products
Select the CDs and products you would like to install.
Solaris 8 Documentation English 204.4 MB
Solaris 8 Software 2 of 2 0.0 MB
Computer Systems Supplement CD 217.6 MB
Alternate Pathing 2.3 2.6 MB
CDRW 1.0 0.5 MB
Java3D 1.1.2 13.7 MB
OpenGL 1.2.1 79.3 MB
PC launcher 1.0.1/PC file viewer 1.0.1 8.6 MB
RSC 1.0 6.6 MB
ShowMe TV 1.3 22.4 MB
SunATM 5.0 8.4 MB
SunFDDI PCI 3.0 1.4 MB
SunFDDI SBus 7.0 1.5 MB
SunForum 3.0 15.4 MB
Sun GigabitEthernet 3.0 0.6 MB
SunHSI PCI 3.0 0.5 MB
SunHSI SBus 3.0 0.5 MB
Sun Hardware AnswerBook 8.1 MB
SunVTS 4.1 57.4 MB
SSP 3.3 30.0 MB
SSP 3.3 Answerbook 1.8 MB
Capacity on Demand 1.0 1.1 MB
Netra ct Platform 1.0 4.2 MB
Netra t Lights Out Management 2.0 0.4 MB
Netra t1 1xx Alarms 2.0 0.3 MB
< Back
Next >
Exit

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

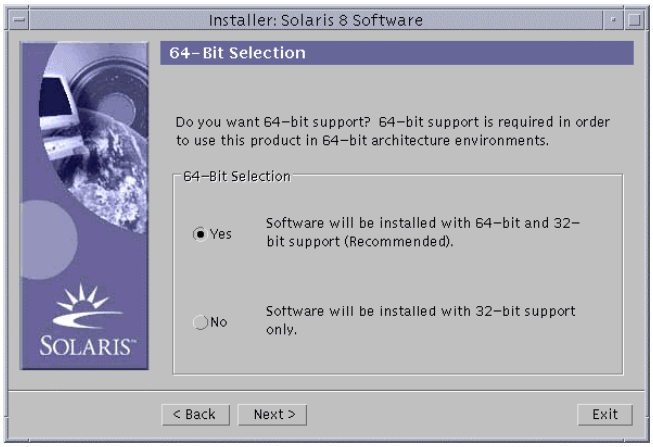
Un-check **PC launcher 1.0.1/PC file viewer 1.0.1**
RSC 2.2
ShowMe TV 1.3
SunATM5.0
SunFDDI PCI 3.0
SunFDDI Sbus 7.0
SunForum 3.1
SunHSI PCI 3.0
SunHSI Sbus 3.0

Click [**Next**>].

34. Select **None** and click [**Next**>].

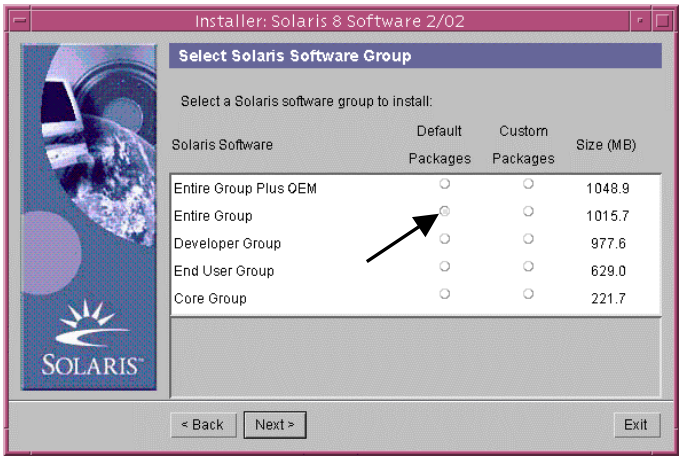

Installer: Solaris 8 Software
Additional Products
To scan for additional products, select the location you wish to scan. Products found at the selected location that are in a Web Start Ready install form will be added to the Products list.
Web Start Ready product scan location:
None
Product CD
Kiosk Download
Local or Network File System
SOLARIS
< Back
Next >

35. The following window does not appear at **SunBlade** systems. Select **Yes** and click [**Next**>].

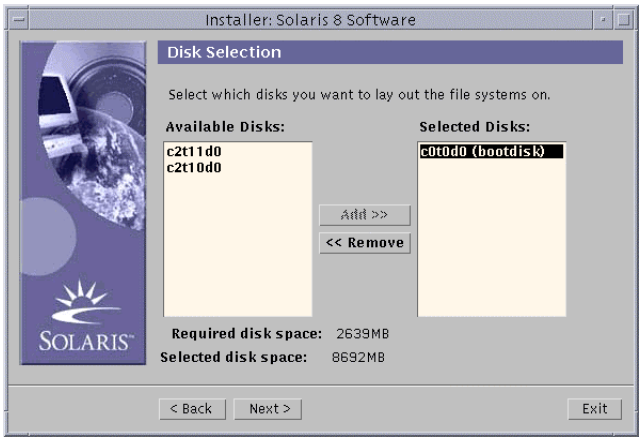

Installer: Solaris 8 Software
64-Bit Selection
Do you want 64-bit support? 64-bit support is required in order to use this product in 64-bit architecture environments.
64-Bit Selection
Yes
Software will be installed with 64-bit and 32-bit support (Recommended).
No
Software will be installed with 32-bit support only.
SOLARIS
< Back
Next >
Exit

36. Select **Default Packages** for **Entire Group** and click [**Next**>].

Copyright © 2004 Philips Medical Systems



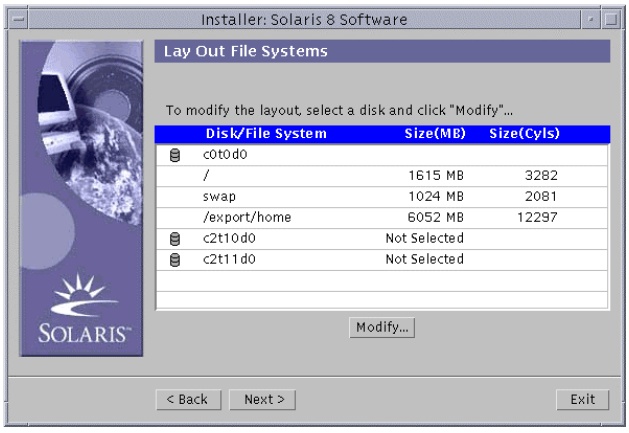
37. Selected disk**: c0t0d0 (bootdisk).** Click [**Next**>].



> ***Note***
> This list may look differently on your system.

Note: The other disks are image disks; these are not available on a Workspot. The indicated amount of selected diskspace depends on the hardware configuration.

38. After a while the following panel appears: Select disk **c0t0d0** and click [**Modify...**].



39. Delete the contents (/export/home) of the fields **File System** and **Size** for **Slice 7**.

40. For hard disks of a size of 4GB or smaller enter

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

Slice	File System	Size	
0	/	nnnn MB	for ***nnnn*** use the remaining size (Free) of the disk.

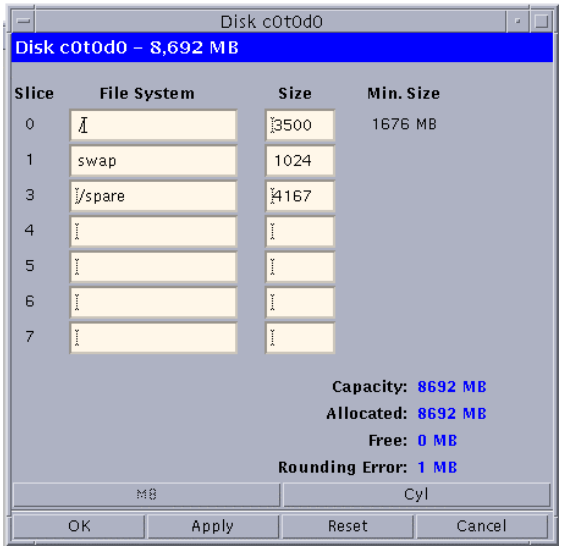
For hard disks greater 4GB (e.g. 8GB) enter

Slice	File System	Size	
0	/	3500 MB	
3	/spare	xxxx MB	for ***nnnn*** use the remaining size (Free) of the disk

"Free" may not be negative, "Free" must be at least 0 MB!

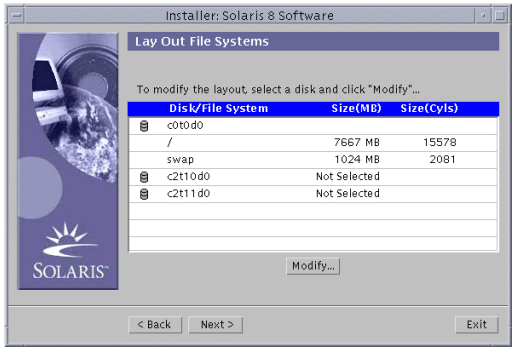
NOTE

*Due to rounding aspects the swap size may be changed afterwards by the system e.g. to 1026 MB. Reduce /**spare** until "Free" is positive.*



NOTE
When "Cyl" is displayed instead of "MB" :
Click [**MB**].

41. Click [**Apply**] then [**OK**].
42. Click [**Next**>].

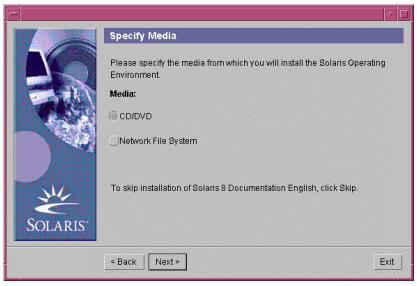


43. If not already done: re-connect the network cable.
44. Click [**Install now**].

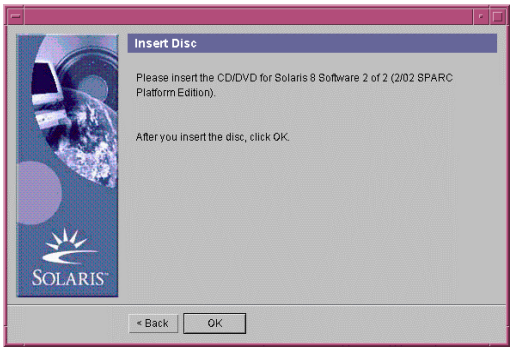
Copyright © 2004 Philips Medical Systems

Installer: Solaris 8 Software
Ready to Install
The following items will be installed:
Solaris Operating Environment: Solaris 8 Software
Solaris Software Group: Entire Solaris Software Group
64-Bit Selection: Yes
Region and Locales:
North America
English (United States) (en_US)
English (POSIX C) (C)
System Locale: English (United States,ISO8859-15) (en_US.ISO8859-15)

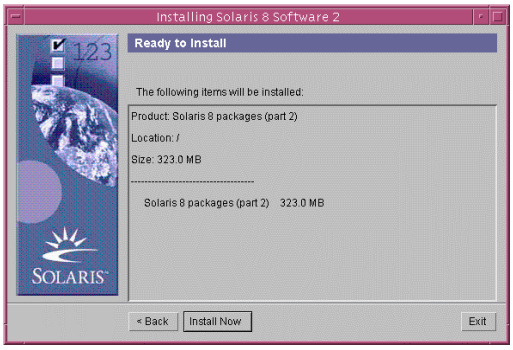
45. About 15 to 30 minutes later the following panel appears.
Select **CD/DVD** and click [**Next**>].


Specify Media
Please specify the media from which you will install the Solaris Operating Environment.
Media:
CD/DVD
Network File System
To skip installation of Solaris 8 Documentation English, click Skip.
SOLARIS
< Back
Next >
Exit

46. Insert CD **Solaris 8 Software 2 of 2** and click [**OK**].

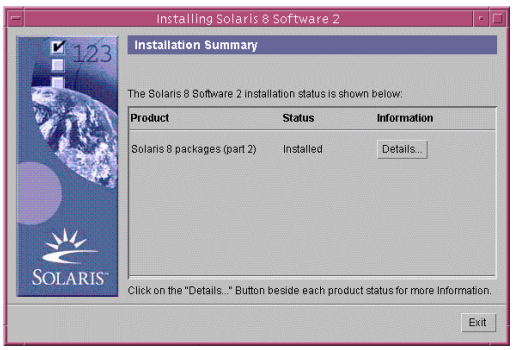

Insert Disc
Please insert the CD/DVD for Solaris 8 Software 2 of 2 (2/02 SPARC Platform Edition).
After you insert the disc, click OK.
SOLARIS
< Back
OK

47. Click [**Install Now**].

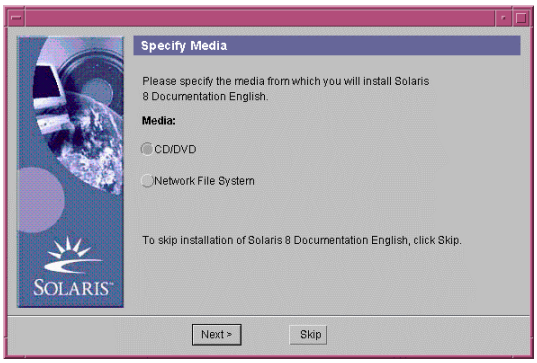


48. About 10 minutes later the following panel appears.
Click [**Exit**].

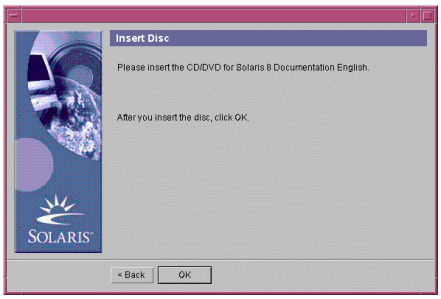
Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED



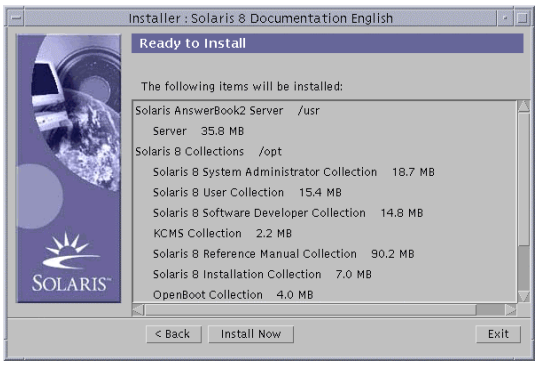
49. Select **CD/DVD** and click [**Next>**].


Specify Media
Please specify the media from which you will install Solaris 8 Documentation English.
Media:
CD/DVD
Network File System
To skip installation of Solaris 8 Documentation English, click Skip.
Next >
Skip

50. Insert CD **Documentation** and click [**OK**].

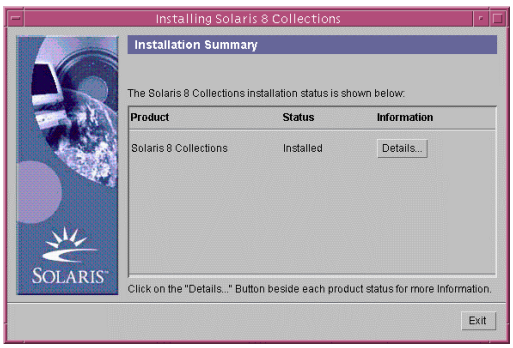


51. Click [**Install now**].


Installer : Solaris 8 Documentation English
Ready to Install
The following items will be installed:
Solaris AnswerBook2 Server /usr
Server 35.8 MB
Solaris 8 Collections /opt
Solaris 8 System Administrator Collection 18.7 MB
Solaris 8 User Collection 15.4 MB
Solaris 8 Software Developer Collection 14.8 MB
KCMS Collection 2.2 MB
Solaris 8 Reference Manual Collection 90.2 MB
Solaris 8 Installation Collection 7.0 MB
OpenBoot Collection 4.0 MB
< Back
Install Now
Exit

52. About 10 minutes later the following panel appears.
    Click [**Exit**].

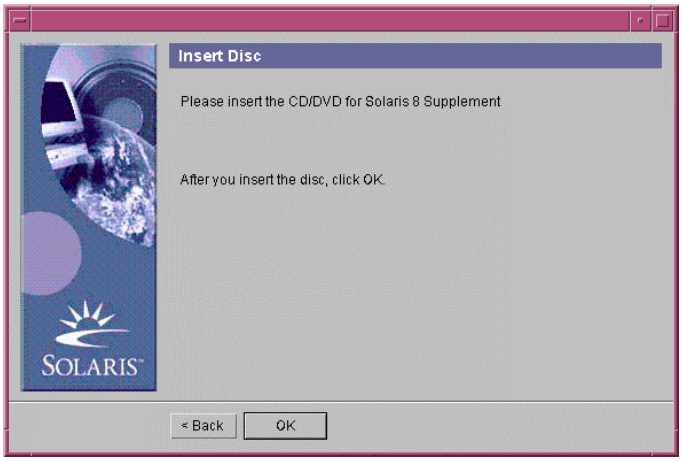
Copyright © 2004 Philips Medical Systems



53. The system reboots automatically.

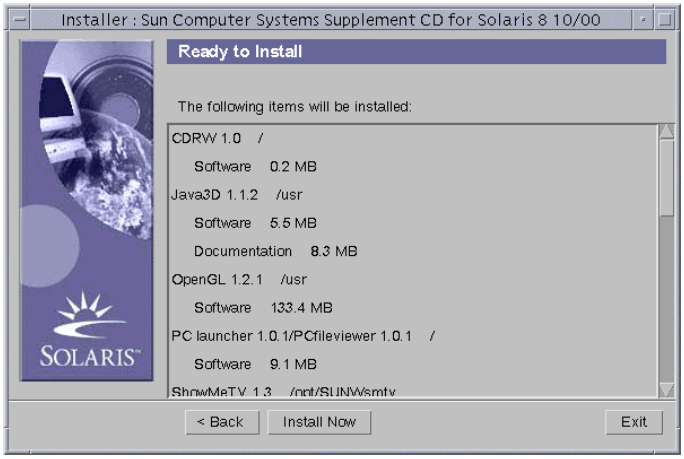
54. After rebooting the system the following window appears.
Select **CD/DVD** and click [**Next>**].

55. Insert the CD **Software Supplement** and click [**OK**].

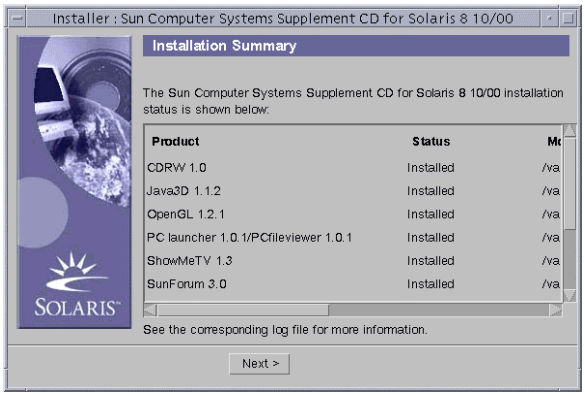


56. After a while the following panel appears.
Click [**Install now**].

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED



57. About 5 minutes later the following panel appears.
    Click [**Next**>] then remove the CD from the drive.


Installer : Sun Computer Systems Supplement CD for Solaris 8 10/00
Installation Summary
The Sun Computer Systems Supplement CD for Solaris 8 10/00 installation status is shown below:
Product
Status
CDRW 1.0 Installed
Java3D 1.1.2 Installed
OpenGL 1.2.1 Installed
PC launcher 1.0.1/PCfileviewer 1.0.1 Installed
ShowMeTV 1.3 Installed
SunForum 3.0 Installed
See the corresponding log file for more information.
Next >

58. The system reboots automatically.

59. Installing the operating system is now done. Proceed with installing the application software: see **Installing the application software** on page **60**.

Copyright © 2004 Philips Medical Systems

5.3 Re-installing the operating system from DVD

This chapter describes the necessary procedures to re-install the application software when the software was previously installed or when a system disk has to be replaced and the application software must be re-installed.

For the SunBlade 1500 and 2500 the Solaris 8 operating system is distributed on DVD.

Before installing the Solaris 8 operating system the following steps have to be done;

- power off system
- power on system
- Interrupt the **initializing memory** procedure by pressing simultaneously: <**Stop**> and <**A**>.
  The system will respond with the ***OK*** prompt.

1. Insert the DVD "**Solaris 8**".

2. Enter: **boot cdrom - install**
   The system is booting...

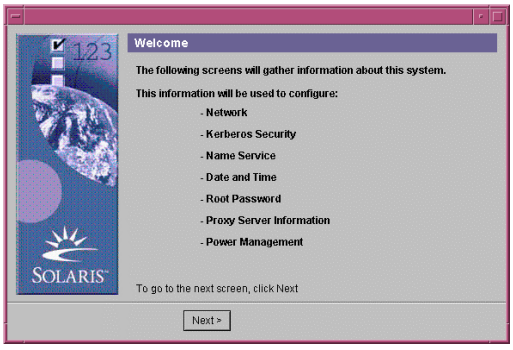
3. Enter: **0** (english):

```
Select a Language

   0. English
   1. French
   2. German
   3. Italian
   4. Japanese
   5. Korean
   6. Simplified Chinese
   7. Spanish
   8. Swedish
   9. Traditional Chinese

Please make a choice (0 - 9), or press H or ? for Help:
```

4. Enter : **50** (U.S.A. (en_US.ISO8859-15).

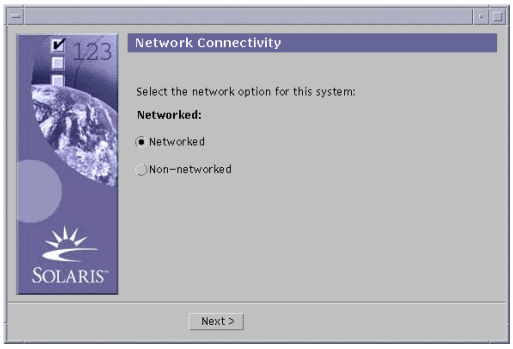
```
Select a Locale

0. English (c - 7-bit ASCII)
1. Albania (ISO8859-2)
2. Australia
3. Belgium-Flemish
..
17. Finland (ISO8859-1)
18. Finland (ISO8859-15 - Euro)

Press Return to show more choices.
Please make a choice (0 - 51), or press h or ? for help:
```

5. After a while the Welcome window appears : Click [**Next**>].



Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

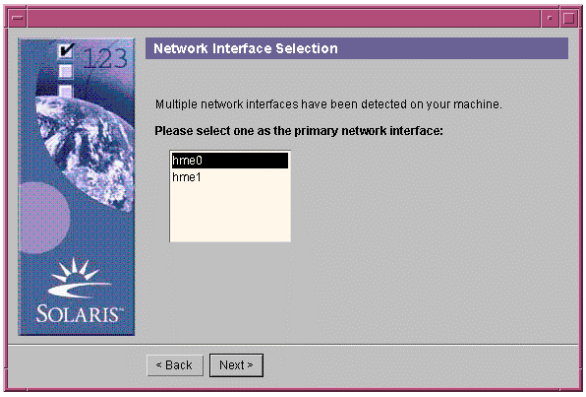
6. Select **Networked** and click [**Next**>].



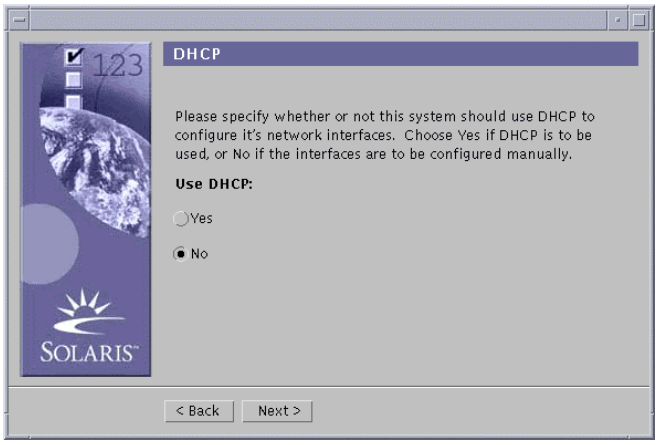
7. When there are **more than one network adaptors** installed in the system the following window **may** appear. If not, skip this step.

   for a SunBlade 1500 select **bge0**.

   Click [**Next**>].

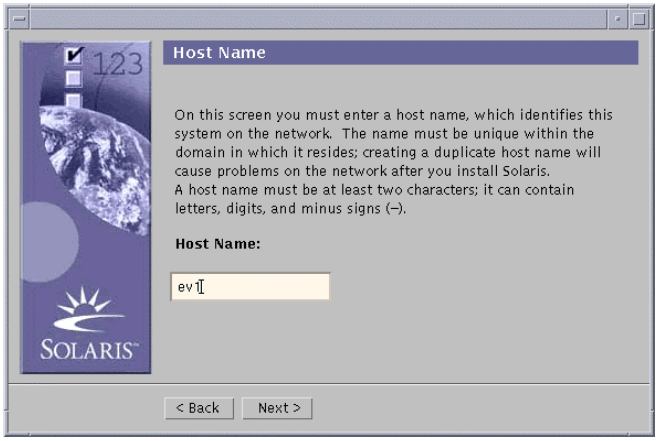


8. Select **No** and click [**Next**>].


DHCP
Please specify whether or not this system should use DHCP to configure it's network interfaces. Choose Yes if DHCP is to be used, or No if the interfaces are to be configured manually.
Use DHCP:
Yes
No
SOLARIS
< Back
Next >
123

9. Enter the host name (e.g. ev1) and click [**Next**>].

Copyright © 2004 Philips Medical Systems

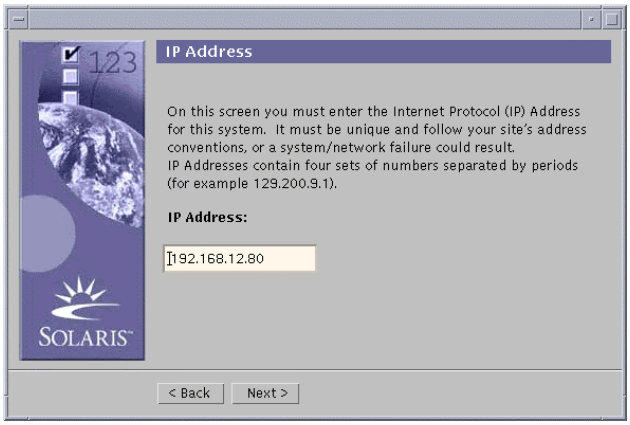

Host Name
On this screen you must enter a host name, which identifies this system on the network. The name must be unique within the domain in which it resides; creating a duplicate host name will cause problems on the network after you install Solaris.
A host name must be at least two characters; it can contain letters, digits, and minus signs (-).
Host Name:
ev1
SOLARIS
< Back
Next >

NOTE

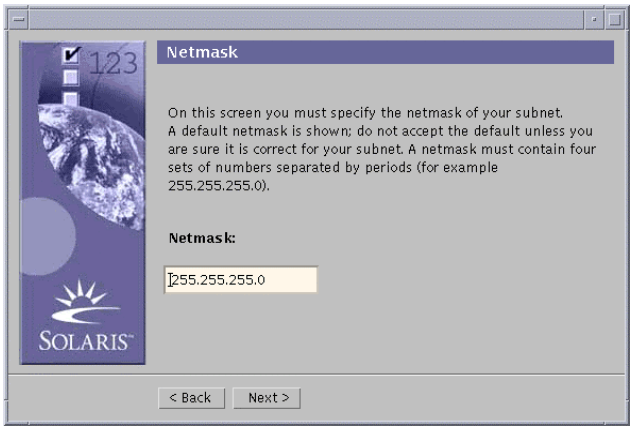
Solaris 8 installation procedure does not accept underscores "_" in the host name. Therefore do not use underscores in above panel. When you want to use underscores anyway (e.g. in case of upgrading a system which was already defined in the network with a host name including underscores), you can define the IP Node Name (incl. underscores) of the EasyVision in the config main panel. This way you do not have to reconfigure the IP Node Name on other systems that are addressing this EasyVision.

---

10. Enter the IP address and click [**Next**>].

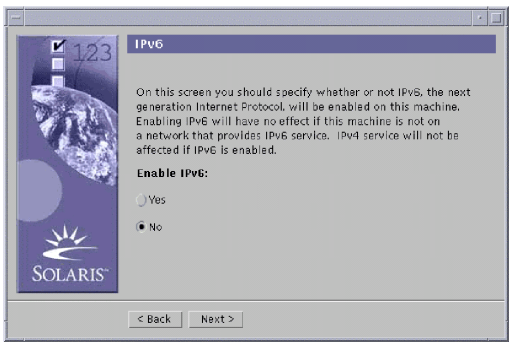

IP Address
On this screen you must enter the Internet Protocol (IP) Address for this system. It must be unique and follow your site's address conventions, or a system/network failure could result.
IP Addresses contain four sets of numbers separated by periods (for example 129.200.9.1).
IP Address:
192.168.12.80
SOLARIS
< Back
Next >

11. Verify the netmask and click [**Next**>].

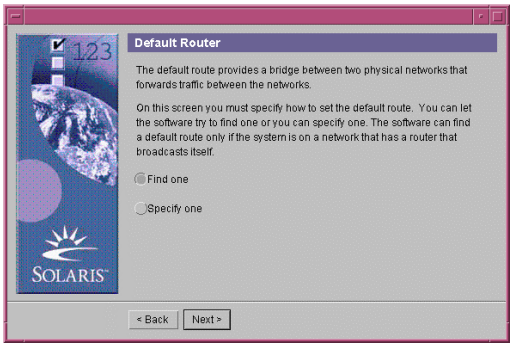

Netmask
On this screen you must specify the netmask of your subnet.
A default netmask is shown; do not accept the default unless you are sure it is correct for your subnet. A netmask must contain four sets of numbers separated by periods (for example 255.255.255.0).
Netmask:
255.255.255.0
SOLARIS
< Back
Next >

12. Select **No** and click [**Next**>].

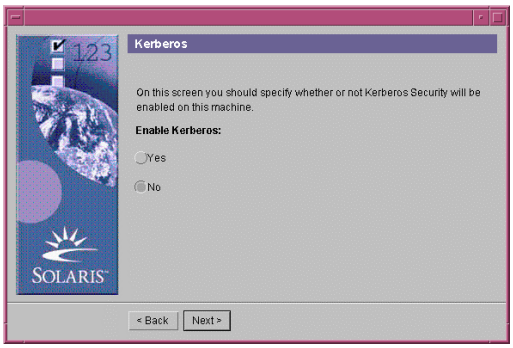
Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED


IPv6
On this screen you should specify whether or not IPv6, the next generation Internet Protocol, will be enabled on this machine. Enabling IPv6 will have no effect if this machine is not on a network that provides IPv6 service. IPv4 service will not be affected if IPv6 is enabled.
Enable IPv6:
Yes
No
SOLARIS
< Back
Next >

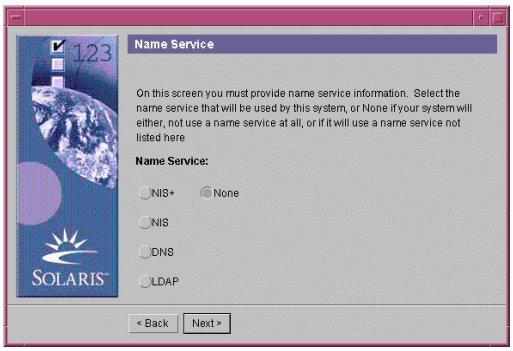
13. Select **Find one** and click [**Next**>].


Default Router
The default route provides a bridge between two physical networks that forwards traffic between the networks.
On this screen you must specify how to set the default route. You can let the software try to find one or you can specify one. The software can find a default route only if the system is on a network that has a router that broadcasts itself.
Find one
Specify one
SOLARIS
< Back
Next >

14. Select **No** and click [**Next**>].

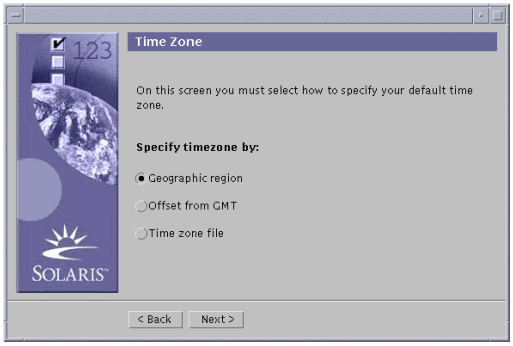


15. Select **None** and click [**Next**>].

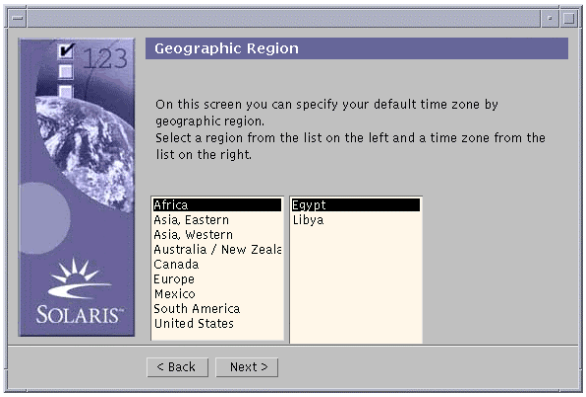

Name Service
On this screen you must provide name service information. Select the name service that will be used by this system, or None if your system will either, not use a name service at all, or if it will use a name service not listed here
Name Service:
NIS+
None
NIS
DNS
LDAP
SOLARIS
< Back
Next >

16. Select **Geographic region** and click [**Next**>].

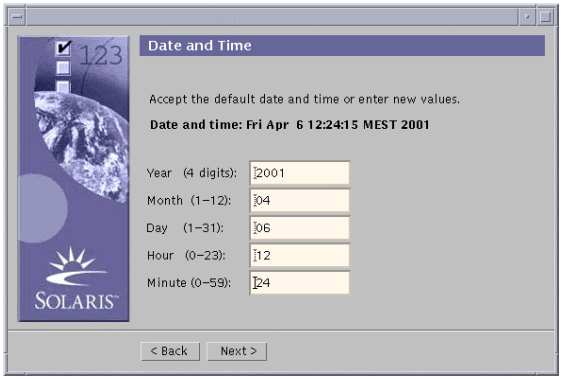
Copyright © 2004 Philips Medical Systems



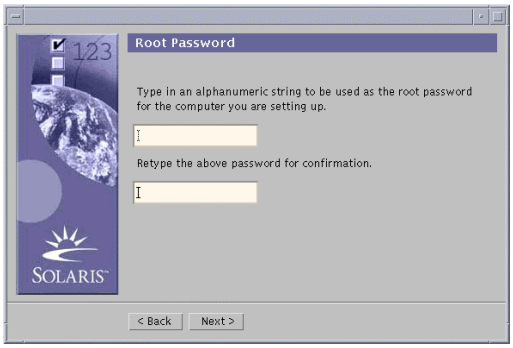
17. Select your region and click [**Next**>].



18. Enter date and time and click [**Next**>].

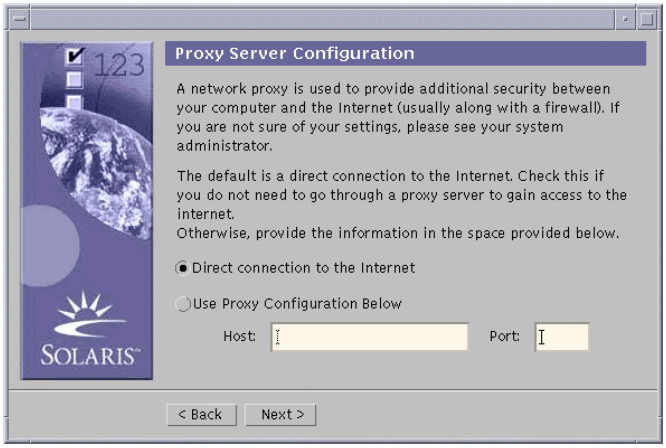

Date and Time
Accept the default date and time or enter new values.
Date and time: Fri Apr 6 12:24:15 MEST 2001
Year (4 digits): 2001
Month (1–12): 04
Day (1–31): 06
Hour (0–23): 12
Minute (0–59): 24
SOLARIS
< Back
Next >

19. Enter : password, re-enter: password.
    Click [**Next**>].

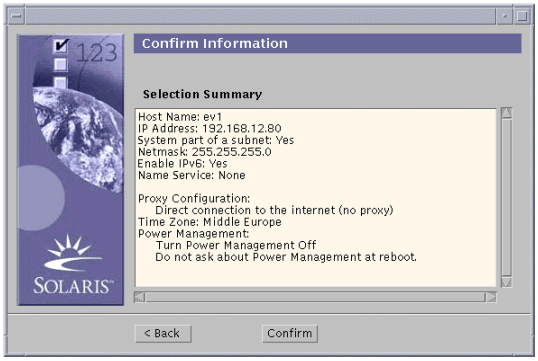

Root Password
Type in an alphanumeric string to be used as the root password for the computer you are setting up.
Retype the above password for confirmation.
SOLARIS
< Back
Next >

20. Select **Direct connection to the Internet** and click [**Next**>].

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED


Proxy Server Configuration
A network proxy is used to provide additional security between your computer and the Internet (usually along with a firewall). If you are not sure of your settings, please see your system administrator.
The default is a direct connection to the Internet. Check this if you do not need to go through a proxy server to gain access to the internet.
Otherwise, provide the information in the space provided below.
Direct connection to the Internet
Use Proxy Configuration Below
Host:
Port:
< Back
Next >

21. Check the information and click [**Confirm**].



22. When an error message appears: click [***Accept***].

23. After about 20 minutes later the system reboots. This completes the installation of Solaris 8 from DVD.

24. After reboot:
    Login: ***root***
    Password: ***password***

25. Wait until the file manager window opens: Click **File** and select **Eject**.
    Remove the DVD from the drive.

26. Insert the **Security Patches** CD.

27. Close the file manager window.

28. Within the **Terminal** window enter ***cd /cdrom/cdrom0***

29. Enter ***./install_cluster***

30. On the question `Are you ready to continue with install? [y/n].`
    Enter <**Y**> to start the installation of the security patches. This takes about 20 minutes.

    Don't panic: Failed **return code** means that the security patch is already installed.

31. When the installation has completed reboot the system by entering in the ***Console*** window : ***init 6***
    While the system is rebooting remove the CD from the drive.

32. This completes the installation of the security patches. Proceed with installing the application software in chapter **Installing the application software** on page **60.**

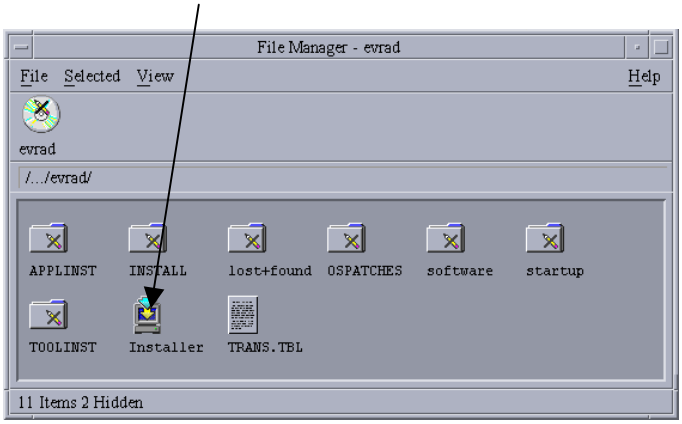
Copyright © 2004 Philips Medical Systems

5.4 Installing the application software

Login: ***root***
Password: ***password***

1. Insert the CD **Application Software EasyVision RAD R 4.2 L6**. Wait until the File Manager appears.

2. Double-click **Installer.**



3. Enter ***Y***.

```
....
That amount will do fine for this installation
Do you want to install the EasyVision Application [y/n]
```

4. Answer accordingly:

```
. . .
Please specify the kind of monitor you have.

Enter 1 for a CRT monitor
Enter 2 for a LCD monitor
Your choice:
```

5. Enter ***Y***.

```
...
Disk c1t11d0 appears to be a previous image disk for this system.
.
Do you want to re-use it as image disk (y/n).
```

6. When installing the application software is done, press <**Enter**> to reboot.
   While the EasyVision is rebooting remove the CD from the drive.

```
.
License file restored from /dbadmin
To activate the just installed EasyVision software, the system
must be rebooted now.
When the system is up again, you need to Configure the system.

Press enter to start the reboot..
```


Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

7. After rebooting the system the following screen appears.

```
Config Menu: What do you want to do?

       1. Start Configuration
       2. Reinstall Application
       3. Login as root
       4. Install License File from diskette
       5. Install License File from CD

       0 Shutdown
```

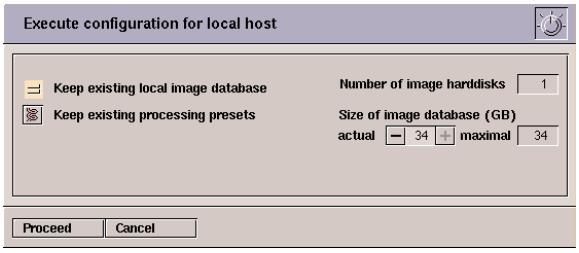
   Select **1. Start Configuration**.

   Starting the configuration program takes about 30 seconds.

To make changes effective you need to click [**Execute...**] to perform the actual configuration of this EasyVision and to update the Setup Database.

8. Click [**Execute...**].

9. Before execution starts this panel is displayed.



10. Click [**Proceed**].

11. When done, the system performs a reboot.

12. Re-installing the software is now done and the system is operational.

Copyright © 2004 Philips Medical Systems

6 INSTALLING SOLARIS SECURITY PATCHES

This chapter describes the necessary procedures to install Solaris security patches. Use this procedure as needed.

1. Go to Service menu, then go to the command prompt.
2. Insert the **Security Patches** CD.
3. Enter ***cd /cdrom/cdrom0***
4. Enter ***./install_cluster***
5. On the question **`Are you ready to continue with install? [y/n].`**
   Enter <**Y**> to start the installation of the security patches. This takes about 20 minutes.

   Don't panic: Failed **return code** means that the security patch is already installed.
6. When the installation has completed reboot the system by entering: ***init 6***
   While the system is rebooting remove the CD from the drive.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

7 USING THE CONFIGURATION PROGRAM

Before starting the configuration procedure, it is recommended to collect all IP addresses, Application Entity Titles (DICOM), node names, etc.

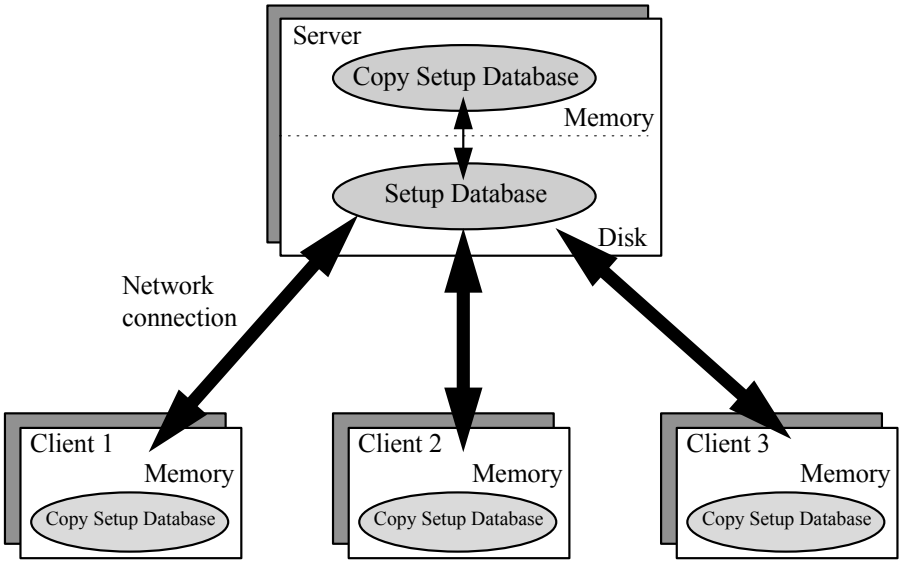
There are two kinds of possible configurations for EV RAD in a PCR cluster:
- PCR stand-alone system
- PCR client/server system

Note

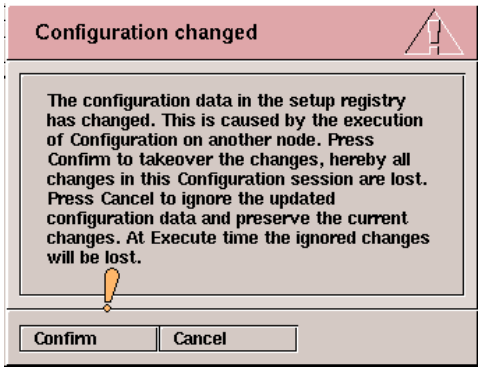
On a server: Always configure the client side first!

7.1 The Setup Database

The Setup Database is running on the server and contains all configuration data of all EasyVisions in the cluster. Via the network connection the clients take over their own configuration and the configuration of the modalities. This means that the clients don't have their own Setup Database.



If one or more stations are running in Configuration mode simultaneously and changes have been made, the next panel may show up.


Configuration changed
The configuration data in the setup registry has changed. This is caused by the execution of Configuration on another node. Press Confirm to takeover the changes, hereby all changes in this Configuration session are lost. Press Cancel to ignore the updated configuration data and preserve the current changes. At Execute time the ignored changes will be lost.
Confirm
Cancel

Copyright © 2004 Philips Medical Systems

7.2 Starting up the configuration program

There are **3 possibilities** to reach the configuration menu.

1 . From the Startup menu

- Select **4. Installation/Configuration**:

```
EASYVISION STARTUP MENU
    What do you want to do?:
      1. Start Application
      2. Start Customization
      3. Go to Service Menu
      4. Go to Installation/Configuration Menu

      0. Shutdown
```

- Select **2. Start Configuration**:

```
Installation/Configuration Menu:

    What do you want to do?:
      1. Install Application
      2. Start Configuration
      3. Change IP address
      4. Change System's Date and Time

      0. Return to Startup Menu
```

- Enter password:

```
Starting configuration
Password:    password

Starting configuration takes about 30 seconds.
```

2 . Software was loaded from scratch

If the software was loaded from scratch (e.g. after replacement of the system disk), the following menu is displayed:

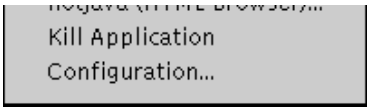
```
Config Menu: What do you want to do?

       1. Start Configuration
       2. Reinstall Application
       3. Login as root

       0 Shutdown
```

Select **1. Start Configuration**

3 . Press the 'Open' button on the keyboard

The configuration program can also be started when the application is running. This mode is just meant for checking the configuration not for making any changes.

- Press the <**Open**> button on the keyboard to switch to the Open Windows environment.
- Right-click the desktop and select **Configuration**.

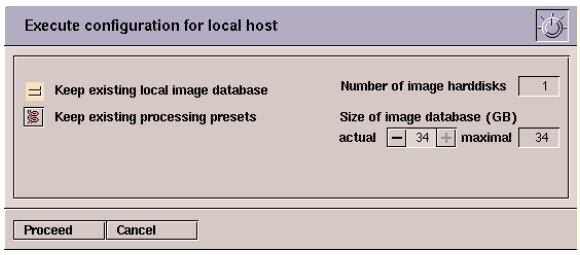


- When finished, double-click the icon to return to the application.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

7.3 Executing the configuration

To make changes effective you need to click [**Execute...**] to perform the actual configuration of this EasyVision and to update the Setup Database. Before execution starts this panel is displayed:



The option **Keep existing local database** is only selectable if a correct and compatible database (image- and Setup Database) exists. **The image database is deleted if this option is not highlighted!**

With the selection button **Keep existing processing** the following selections are possible:

- **Keep existing processing presets**
  The current processing presets are kept as they are
- **Reset processing presets to factory settings**
  The default presets are recovered as they are on a complete new installed system
- **Merge factory presets and current presets**
  Presets already existing in the Setup Database are not overwritten by the factory presets
- **Merge factory presets and current presets. Current presets are replaced by factory presets which have the same key**
  Presets in the Setup Database may be overwritten by properties. Example: 5 presets stored in a property file in a directory overwrite other presets with the same name.

Number of image hard disks shows the number of available hard disks.

With **Size of image database** the amount of used disk space can be decreased, e.g. to speed up database queries.

When finished click [**Proceed**] to finalize the configuration. This takes about one minute.

The system performs a reboot (if necessary) and returns with the Start-up menu.

The following files are (re-) written to hard disk when the configuration is executed:

/easydata/	config.cfg	contains all configuration data
/easydata/UI/configuration/	configuredPrinters.dat	list of configured printers for Digital Diagnost
	export.dat	list of configured export destination (used by USIT)
	presets.dat	overview of processing keys (not used by EV)
	prints.dat	list of configured print formats (used by USIT)
	process.dat	list of available processing keys (used by USIT)
	reports.dat	list of configured print reports (used by USIT)

NOTE

*After executing the configuration, a copy of the **config.cfg** file and the set-up database is written to the directory **/dbadmin** as a backup. This directory is NOT overwritten when you re-install the software. This can be very handy because there is always a backup present on the system. The configuration program always looks first to the directory **/easydata** if a config.cfg and a setup database is present, if not it takes the config.cfg and the setup from the directory /dbadmin. After a re-installation you only have to execute the configuration to get a working system again.*

Copyright © 2004 Philips Medical Systems

7.4 Removing corrupted configuration files

The following instruction is used to delete corrupted configuration data. Handle with care!

1. Go to the Startup Menu
2. Select **3. Go to Service Menu**
3. Select **2. SunOS Menu**
4. Select **2. SunOS**
5. At the prompt enter: ***/easy/service/removeConfigFiles*** and confirm with ***Y***
6. Enter ***exit***
7. Select option **0** twice to logout

Proceed by entering the configuration from scratch or copy any existing backup config data to the directory **/easydata** and start-up the configuration program.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

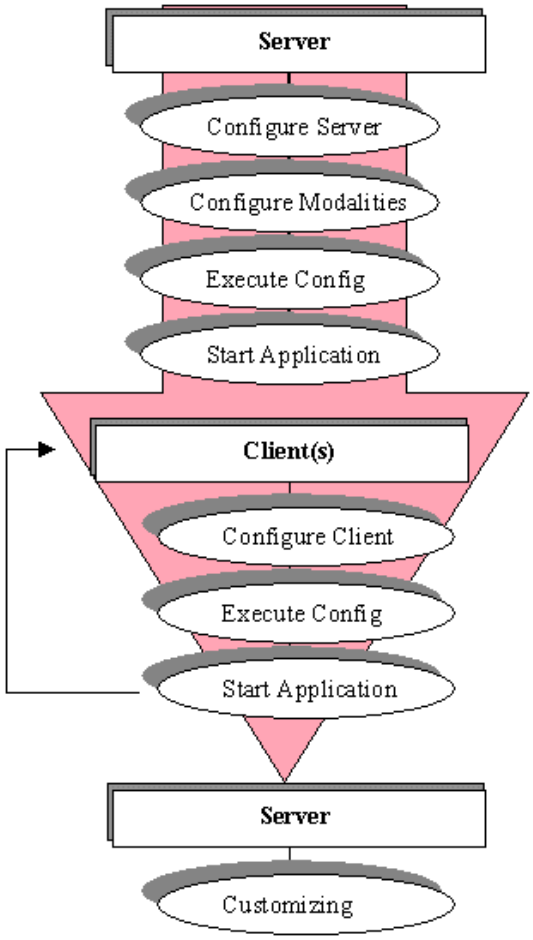
8 CONFIGURATION

See also chapter **Using the Configuration Program** on page 63.

The advised procedure is as follows:

1. Configure the server (set database location to **local**)
   Do not forget to configure the client(s) on the server (if any) before configuring the client(s).
2. *Execute* configuration (chapter: **Executing the configuration** on page 65) on the server.
3. Start the application on the server.
4. Configure the client(s) (set database location to **remote,** using IP address of the server): see chapter **Configuring a client** on page 69.
5. Execute configuration and start the application on the client.

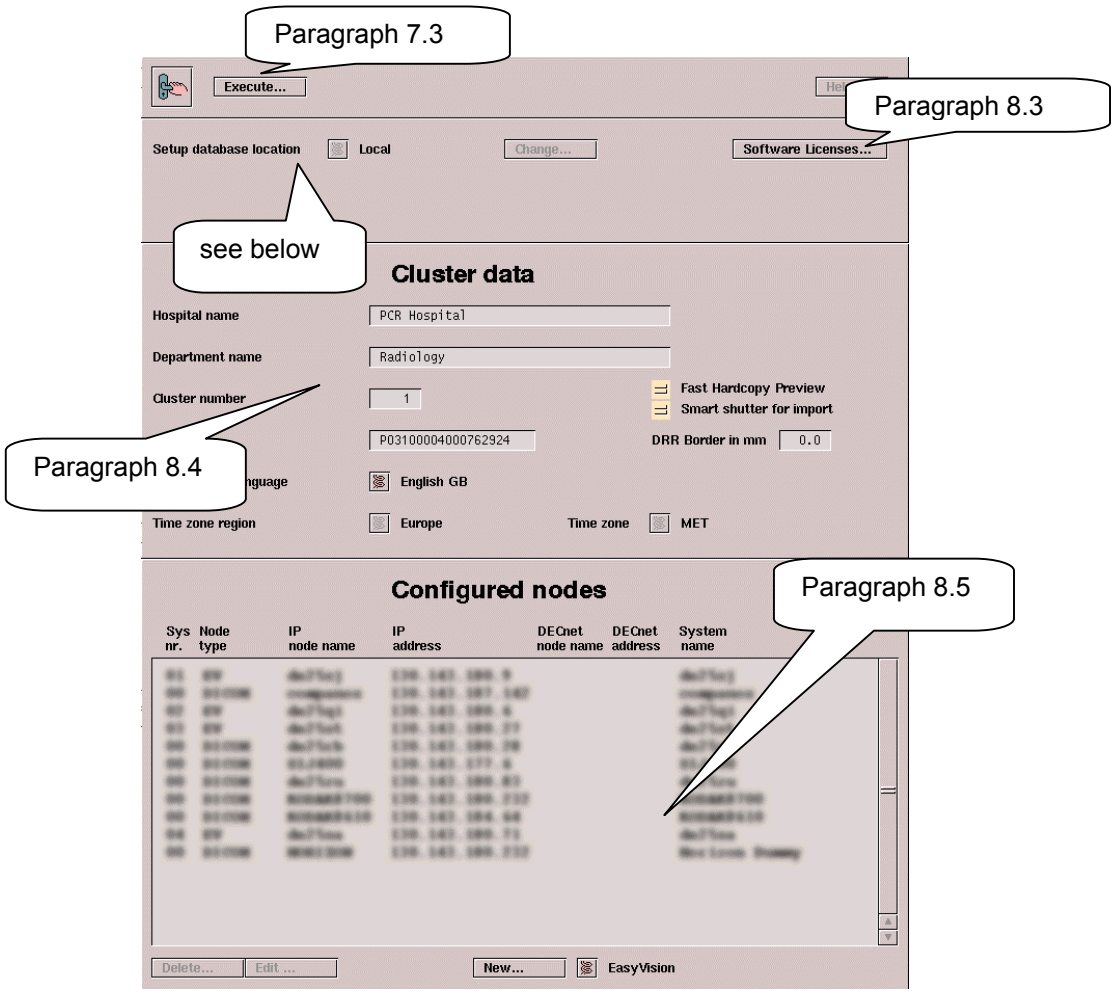
Repeat step 4 to 5 for all clients being part of this cluster.



Start-up the configuration program as described before: the configuration main panel appears. From here you reach all other configuration panels. In the following paragraphs you get further information on each item.

When configuring the EasyVision is done continue with paragraph **Executing the configuration** on page 65 to finalize the configuration.

Copyright © 2004 Philips Medical Systems



Setup database location

In case of a stand-alone or server EasyVision, the Setup database location is set to **local**, otherwise to **remote**. The **[Change…]** button is only to be used when a system is changed from a stand-alone system to a client and vice versa.

8.1 Configuring a server/client cluster

The setup database contains all configuration and customization data. The setup database is located on the server. Via the network connection the clients take over their own configuration and the configuration of the modalities. The clients do not have their own Setup Database.

Note

On a server: Always configure the client side first!

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

8.2 Configuring a client

In case of a client system the IP address has to be changed to connect to the setup database on the server before starting the configuration.

1. From the Start-up menu select **4. Installation/Configuration**:

```
EASYVISION STARTUP MENU
    What do you want to do?:
      1. Start Application
      2. Start Customization
      3. Go to Service Menu
      4. Go to Installation/Configuration Menu

      0. Shutdown
```

2. Select **3. Change IP address:**

```
Installation/Configuration Menu:

    What do you want to do?:
      1. Install Application
      2. Start Configuration
      3. Change IP address
      4. Change System's Date and Time

      0. Return to Startup Menu
```

3. At the next screen enter <Y>:

```
This option changes the IP address for 1 ethernet interface.
It should be used on Clients with incorrect IP addresses to allow them to contact the Server
(please check which interface must be changed).

If the IP address has been changed the system will and the system MUST be configured.

Do you want to continue    (Y|N) ?:
```

4. Enter now hostname, IP address and netmask:

```
Enter hostname :
Enter IP address :
Enter netmask [255.255.255.0] :
```

5. The Ethernet controller is displayed by the system and the next message appears on the screen.

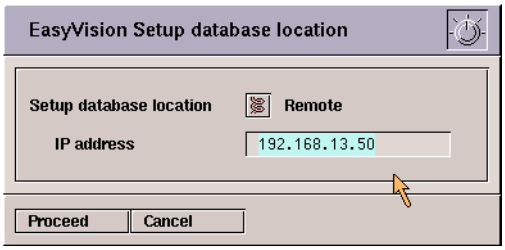
```
This system will reboot itself if this data is accepted

Are these settings correct? [y/n]
```

6. Enter **<Y>** to continue.

The system performs a reboot. Now the IP address is changed and the connection with the setup database on the server can be established.

When starting up the configuration on a client for the first time (after a software re-installation) **or** if the server is down, the following panel appears. Set the database location to **Remote**, fill in the IP address of the server and click [**Proceed**].

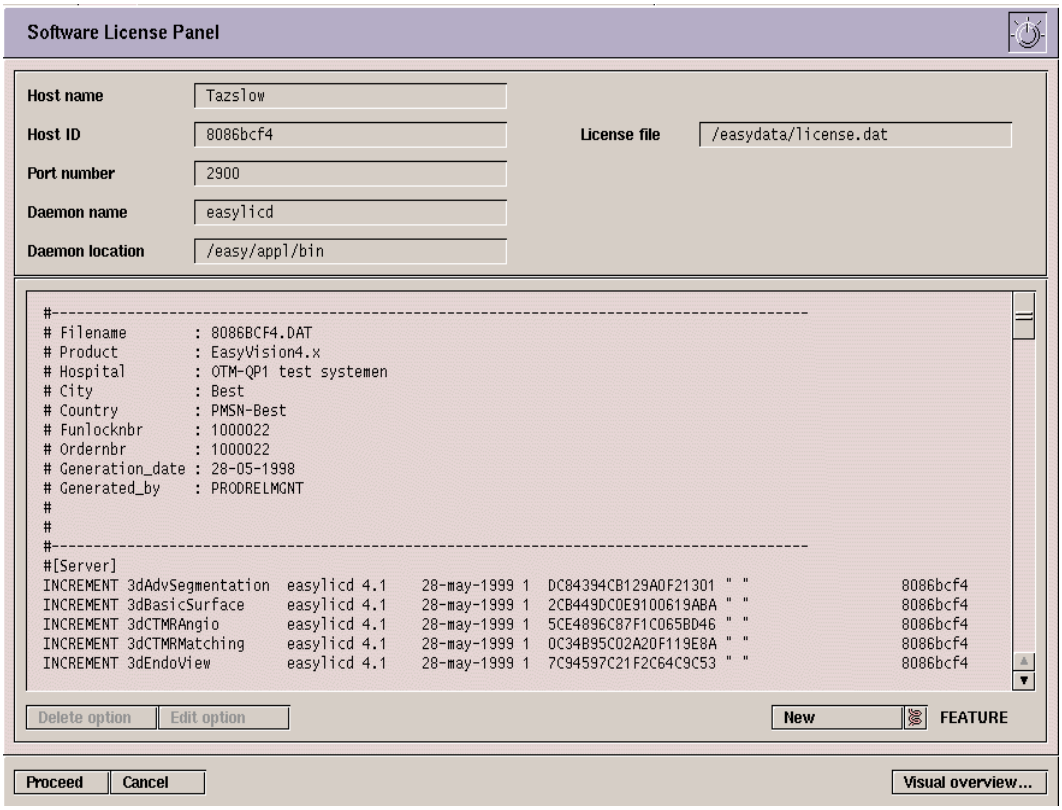
Copyright © 2004 Philips Medical Systems



From the setup database the cluster data and configured nodes are loaded. After configuring all clients execute the server configuration again according to chapter **Executing the configuration** on page 65.

8.3 Software licenses

[Software Licenses…]
Clicking this button gives the software license file overview. In this panel the software license file can be modified and/or a visual overview can be given.



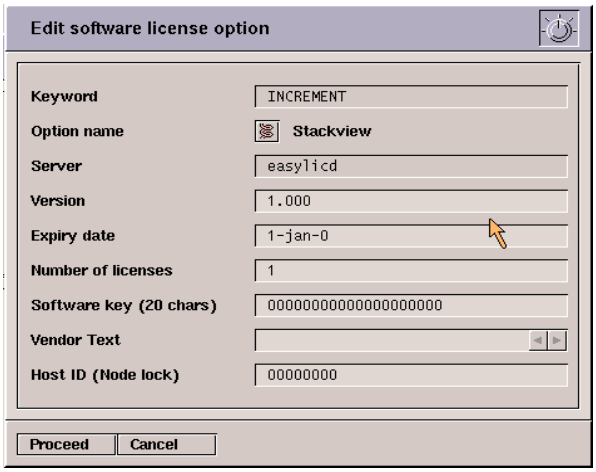
Modifying the software license file can only be done on a stand-alone or server EasyVision. Options can be added, deleted and edited.
Every line consists of one option with all relevant parameters and the encrypted code. Since there is a check-sum on every line, nothing can be changed from that line. Only complete lines (options) can be edited, added or deleted. It is not advised to modify the lines. Use the [**New...**] button to add an option. The software license file **license.dat** must be located in the directory **/easydata**.

Delete option
An option can be selected (high-lighted) and clicking this button deletes the option. **No undo possible!**

Edit option
Gives the possibility to edit options (not recommended).

New...
First select if the option should be of the **increment** or **feature type**. Very experienced people should only use the possibility of 'free format'. Clicking [**New**...] displays the **Edit software license option** panel.

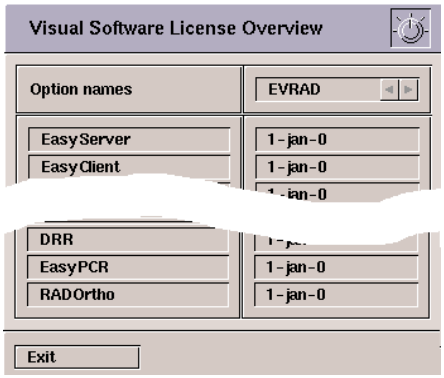
Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED



Select the option name, enter all relevant information and click [**Proceed**].

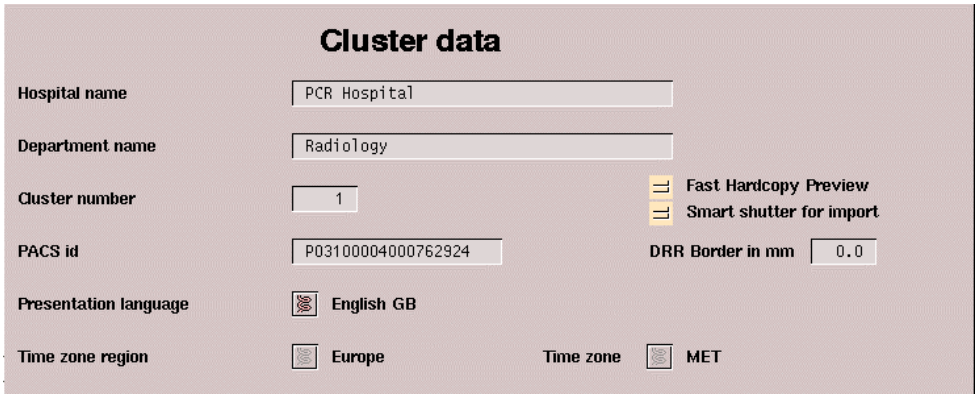
8.3.1 Visual overview

Click [**Visual overview…**]
The following panel is displayed (just an example).



In the overview panel all software options and their expiration dates are shown on the server, also the client-licensed options are visible.

8.4 Cluster Data



Hospital name
Appears on film, max. 30 characters including spaces.

Department name
Appears on film, max. 30 characters including spaces.

Copyright © 2004 Philips Medical Systems

Cluster Number
Sequential identification number for clusters. Must be unique within the hospital. The number is used for the identification of all images made by this cluster.

PACS ID
The PACS ID is a unique number of 17 digits and can be chosen freely. The default is always ok.

Fast Hardcopy Preview
Enabled: allows a much faster preview to print layouts by reducing the image quality of the thumbnail images of the preview.

Smart shutter for import
Disabled: The well-known shutter algorithm is used.
Enabled: A new polygonal shutter algorithm is used.

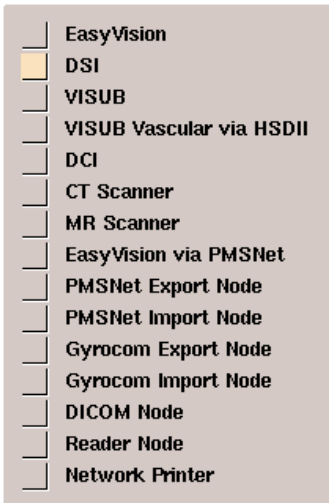
DRR Border in mm
PCR Readers may create a small white area at the border of the image within the tolerance of 2mm. This white line causes a dark border artifact within the image when DRR processing is used. Now the DRR processing leaves out a predefined border. The so-called DRR border is only taken into account if the MPM code of the image begins with 03xx (Mammo). The value for this predefined border can be set in a field in the EV configuration screen.
Range: 0 ... 5 mm
Default value: 0 mm

Presentation language
Select the language to be used within the application.

Time zone region
Set of time zones. Select the right country or part of the world.

Time zone
Select the local time zone.

8.5 Configured Nodes



EasyVision	EasyVisions RAD R4 can also be configured as DICOM node type if remote printing is not required.
Reader Node	PCR Readers AC500/5000, PreView Unit
DICOM Node	All DICOM compatible systems All EasyVisions in another cluster that support DICOM All EasyVisions R4 if no remote printing required All DICOM network printers

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

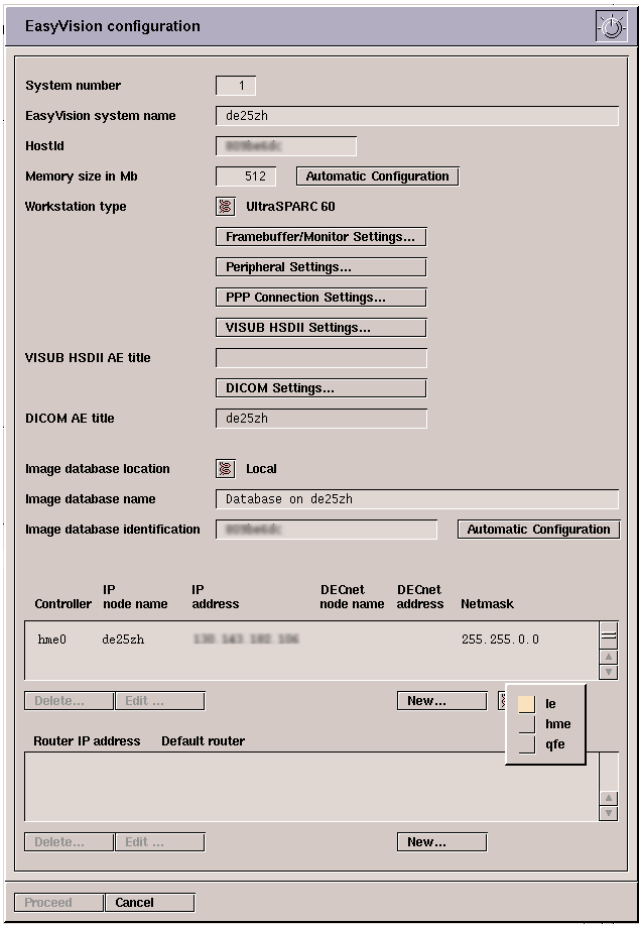
Network Printer	All network printers that do not support DICOM
EasyVision via PMSNet	All EasyVisions that do not support DICOM.
PMSNet Export Node	All systems that can receive PMSNet data (e.g. PMSNet Export Server).
PMSNet Import Node	All systems that can send PMSNet data to EasyVision.

And DSI, DCI, VISUB, CT, MR...

Select the required node type and click [**New...**] for new node or click the associated line in the overview of configured nodes if one exists and click [**Edit...**].

Existing nodes can be removed from the overview of configured nodes by clicking the associated line and clicking [**Delete…**].

8.5.1 EasyVision



System number
This is a sequential identification number within the cluster for the involved system
Enter a unique number for this EasyVision.

EasyVision system name
Enter a unique name for this EasyVision workstation.

HostID
The HostID is already entered when configuring the EasyVision you are working on.
During power on the HostID appears on the screen. The HostID consists of 8 digits/characters. If the HostID contains characters then they must be entered in lowercase.

Copyright © 2004 Philips Medical Systems

Memory size in MByte
The indicated value must be equal to the real size of the memory of the EasyVision. If configuring the EasyVision you are working on click **Automatic Configuration**. This button does not work when configuring another EasyVision R4.

Workstation type
Select one of the choices which apply: UltraSPARC 5/10/60, SunBlade1000, 1500, 2500
Note : For **SunBlade 2000** select **SunBlade1000.**

Framebuffer/Monitor Settings
For setting up graphics board and monitor settings. See paragraph **Framebuffer/Monitor Settings** on page 74.

Peripheral Settings
For setting up all connected peripheral devices like Storage drives, DMS Reader, printers. See paragraph **Peripheral Settings** on page 75.

PPP Connection Settings
See paragraph **PPP Connection Setting** on page 81.

DICOM Settings
For configuring all DICOM settings for this EasyVision. See paragraph **DICOM Settings** on page 81.

Image database location
With a server or stand-alone EasyVision this parameter is set to **local**.

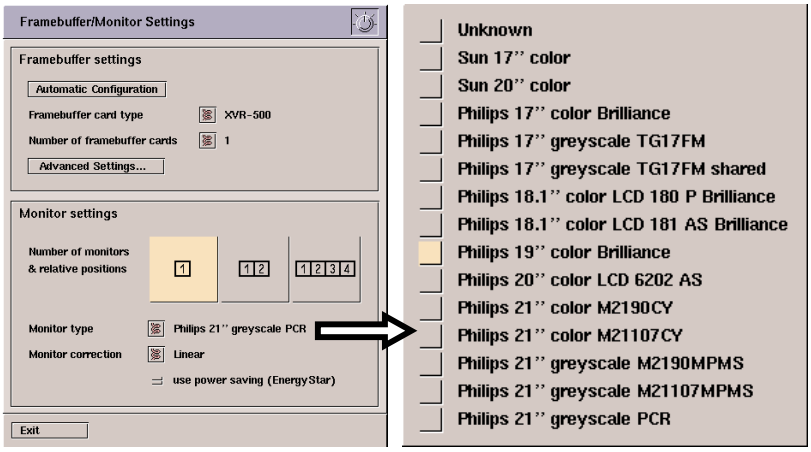
Image database name
Enter a unique name for your image database on this workstation as it appears also within the application program.

Image database identification
Click [**Automatic Configuration**] to get the correct image database identification. This works only for the EasyVision you are working on. Only selectable if database location is set to **Local**.

Ethernet Controllers
See paragraph **Ethernet Controllers** on page 78.

Routers
See paragraph **IP Router Settings** on page 79.

8.5.1.1 Framebuffer/Monitor Settings



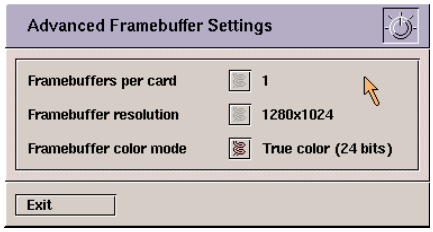
Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

Framebuffers
Click [**Automatic Configuration**] to set the number and type of framebuffer cards automatically. This works only for the EasyVision you are working on!

The Automatic Configuration does not work for a **Dome Md2/PCI** board and the following settings must be set manually:

Framebuffer card type: Dome MD2
Number of frame buffer cards: 1

Advanced Settings....
...are framebuffer dependend and in most cases correct.



Monitor settings
The monitor settings must be changed manually. Right clicking the **Monitor type** button shows all supported monitors. See also the following two tables.

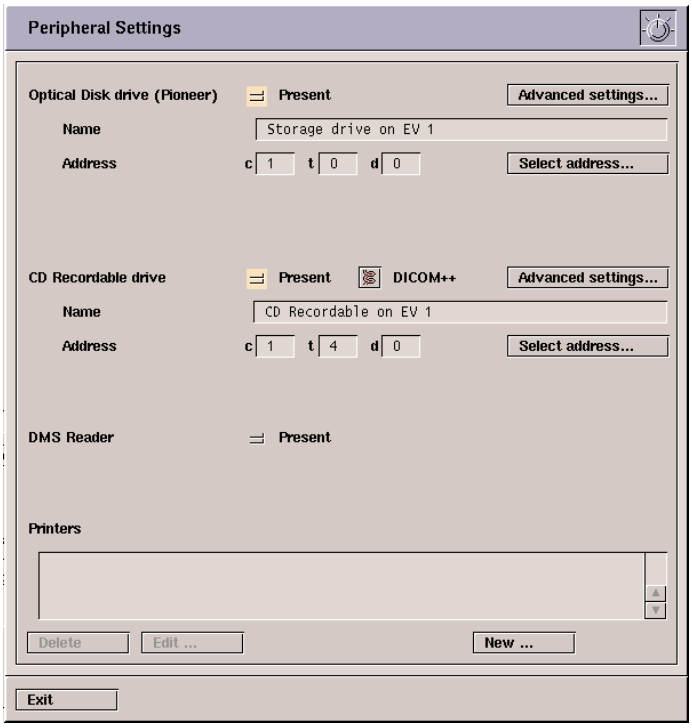
NOTE

Advanced settings are required if a grayscale monitor is used on a color frame buffer. In that case the setting must be 'Grey'. See also the following two tables

Click [**Exit**] after all settings are entered.

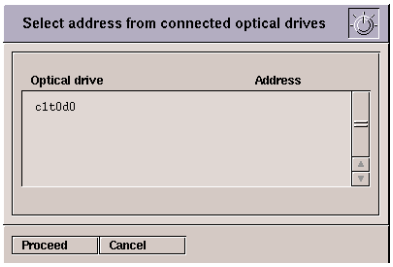
8.5.1.2 Peripheral Settings

In this panel the peripheral units can be configured.

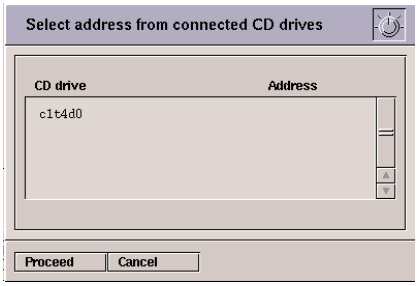


Copyright © 2004 Philips Medical Systems

Optical Disk drive
If the EasySTORE option is available, click **Present** and enter a freely chosen name, to be used within the application to identify the optical disk drive.
When configuring optical disc drives a **device name** must be selected. Click [**Select device...**] and select the device from the list.



CD Recordable drive
This drive is the CD recorder and NOT the CD ROM drive used for software installation. If this option is available, click **Present** and enter a freely chosen name for the CD recorder.
The **DICOM** or the **DICOM++** protocol (including private attributes) can be selected, depending on the images from or to the CD Recordable.
When configuring CD-R drives a **device name** must be selected. Click [**Select device...**] and select the device from the list.



Advanced settings... See paragraph **Advanced settings** on page 93.
DMS Reader
This button is meant for PCR AC3 /3000 and 9000 Readers connected to the EasyVision RAD via the DMS interface board. The selection **Present** can be activated or deactivated.

PCR Readers like AC 500/5000 or the PreView Unit must configured as node type **Reader Node**.

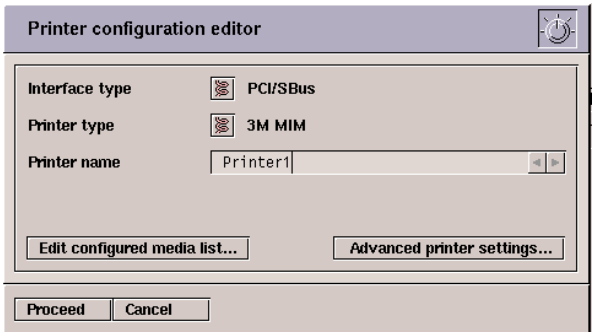
Printers
Various printers can be configured for the EasyVision R4.2. The procedure for this is described in the paragraph below.

8.5.1.2.1 Configuring printers

Click [**New...**] from the **Peripheral Settings** panel to add a printer connected to this EasyVision. If one or more printers have already been configured highlight the printer and click [**Edit...**] to modify or click [**Delete**] to remove the highlighted printer.

The following panel is displayed (as an example):

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED



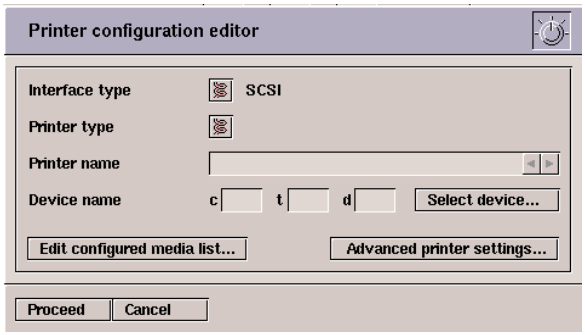
The printer configuration editor has two modes:

1. Standard printer configuration
2. Advanced printer configuration

The advanced printer configuration panel is an extension of the standard printer configuration panel.

Interface type
The interface type controls the contents of the list of selectable models. Right-clicking this button shows the available interface types:

- **PCI/Sbus**: Point to point printers connected via PCI interface card using a 3M compatible protocol
- **SCSI**: printers connected via SCSI



When configuring SCSI printers a **device name** must be selected. Click [**Select device...**] and select the printer from the list. Please note that the SCSI printer must be switched on and connected to the EasyVision to show up in the list.

- **DICOM**: printers connected via Ethernet using the DICOM protocol
- **network**: printers connected via the Ethernet and using another protocol than the DICOM protocol.
- **file**: with this option you can select a real “paper printer” A4 (Europe) or Letter (USA) connected to the parallel port of the EasyVision, or you can select “philips to file”, which generates a sheet in a JPEG or TIFF file in the directory **/easydata/filePrints**.

Printer type
Right-clicking this button shows a list of available printers.

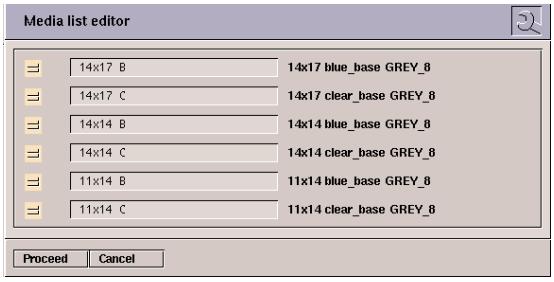
Printer name
This is the name of the printer as it is used in the user interface. This name must be unique in the cluster. This is important when configuring a remote printer via an EasyVision

DICOM Printer AE title / Network service name
The field **DICOM printer AE title** is only displayed when the DICOM interface is selected.
The field **Network service name** is only displayed when **network printer** is selected.

- DICOM printers: Before a DICOM printer can be configured, a DICOM node must be configured which describes the DICOM network properties of the printer. Such description contains an application entity title. Print SCP SOP must be selected. The list of network service names for DICOM printers is formed by the list of application entity titles.
- network printers: Before a network printer can be configured, a network printer node must be configured that describes the network properties of the printer. Such description contains a network service name. The list of network service names for network printers is formed by the list of configured network service names.

Copyright © 2004 Philips Medical Systems

Edit configured media list
This button starts the Media list editor. Depending on the selected printer, you may select those film formats that are in actual use at the site. The disabled formats are not shown and therefore not selectable in the application.



NOTE
The media list should never be empty!
At least one medium must be selected ("yellow light" = ON) to avoid problems in the application software.

A printer can support a large set of media. In a hospital only a small subset is actually used. Therefore in release 4 each medium has a "configured flag" and when this flag is set the medium is shown in the media lists presented to the user. The media list editor offers an interface to reduce the set of configured media to the set of media used in the hospital and to rename the media to a more natural name. The editor panel shows for each medium supported by the printers an entry with:

- the configured option
- the name
- a technical description, specifying
  - medium size
  - medium type, if it is supported by the printer
  - color model, if the printer supports multiple models. This can be:
    - Color (RGB_BI, RGB_PI, BGR_BI, BGR_PI)
    - GREY_8
    - GREY_12
    - Printer supports high resolution

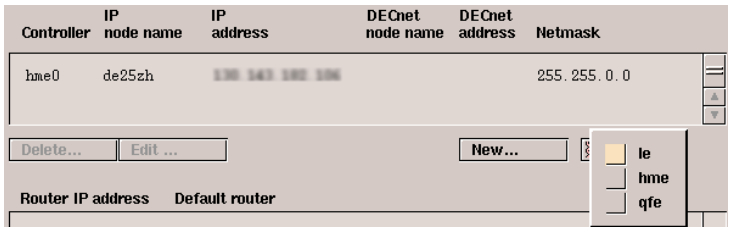
At least one medium must be configured and the names must be unique.

Advanced printer settings
This button switches the printer configuration editor to the advanced printer configuration mode. The advanced printer configuration panel replaces the current panel.

See also **Advanced Printer Configuration** on page 105.

8.5.1.2.2 Ethernet Controllers

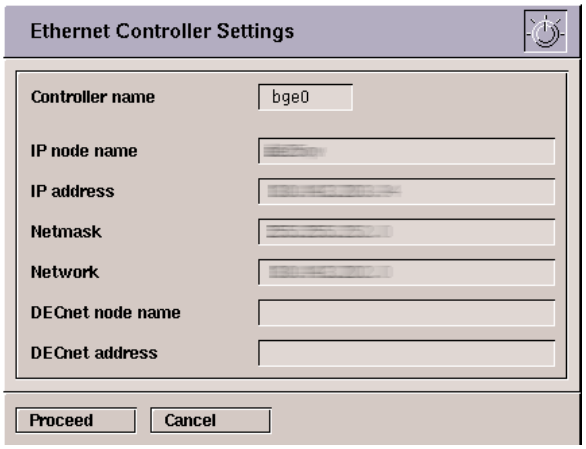
In this panel the Ethernet controller(s) must be filled in. The items to be filled in are strongly dependent on the hardware environment of the cluster(s).



In case of a server/client configuration with an extra Ethernet controller for the client side, the Ethernet Controller of the client side (on the server) must be set first.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

- Select **hme** for fast Ethernet controllers (10/100Mb) and click [**New...**] to add that controller.
- Select **qfe** for quad Ethernet controllers (10/100Mb) and click [**New...**] to add one of the four channels.
- Select **eri0** for SunBlade 1000 computers and click [**New...**] to add that controller.
- Select **bge0** for SunBlade 1500 computers and click [**New...**] to add that controller.
- Select **ge** for Gigabit Ethernet controllers and click [**New...**] to add that controller.
- Select **ce** for Swift Fast Ethernet controllers and click [**New...**] to add that controller.



Remark

The *Quad Fast Ethernet Controller* (qfe) offers four independently switchable 10/100Mb Ethernet channels with auto negotiation and provides operations of up to 100 meters of Twisted Pair without repeaters. The built-in controller included there are five independent network channels available in one EasyVision. In consequence each channel must be configured as a separate Ethernet controller with its own IP address and netmask. This provides the advantage of separating the net load to different network segments.

In the EasyVision configuration screen select under Controller > **qfe** > **New** (for the 1st channel qfe0, the other channels likewise). If channel **qfe1/2/3** is configured before **qfe0** the number 0 has to be changed to the number of the connected channel.

Each of the network interfaces of the adapter has been assigned a unique MAC address. The OpenBoot firmware reports this MAC address via the local-mac-address property in the device nodes corresponding to the network interfaces. local-mac-address = true

Controller name
The name of the controller must be set.

IP node name
Internet protocol name for one of the Ethernet controllers (node). At least one IP address must be filled in per controller. This name can be the same as used for **EasyVision system name**. Do not use the "." or "/" characters within this name.

IP address
IP address for one of the Ethernet controllers (node). At least one IP address must be filled in per controller.

If the network is solely used for different nodes then enter the number 192.0.0.n with n (IP local node-address) ranging from 1 to 254. This number must be unique for each system of the cluster. If a cluster is to be connected to a hospital-network the hospital's network administrator should define the IP network address.

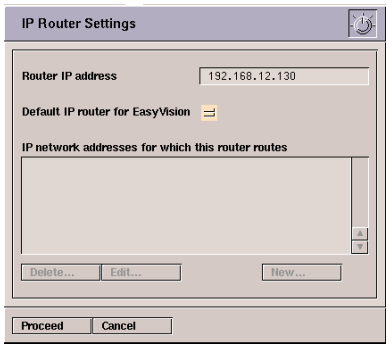
Netmask
Mask number for the network, determining which part of a complete IP address is its network part and which part is its host's part. Keep the default value 255.255.255.0. To be changed only on request of the hospital network administrator.

Network
This value is written to the file **/etc/netmasks** as **network number.** Keep the proposed default value or ask the system administrator.

8.5.1.2.3 IP Router Settings

When a router should be configured click [**New...**] or highlight an existing router, click [**Edit...**] when there is already one configured (to change/check) or [**Delete...**] to remove the router.

Copyright © 2004 Philips Medical Systems

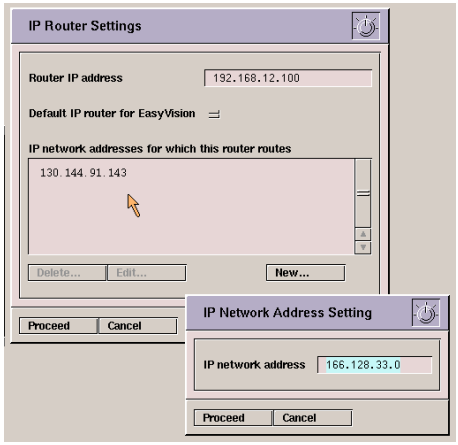


Note:
- This is not needed for configuring remote EasyVision R 4 systems.
- Defining routing is done from the node (EasyVision) you are working on!
- On a client configure the server as default router

Router IP address
IP address of the router. In case of a cluster fill in the *server_fast address* of the server. For clients the server "acts" as a router!

Default IP router for EV
When images are transferred, the EasyVision first looks in the local cluster if the IP address can be found, if not and this option is enabled, the EasyVision sends the images to this IP address to be transferred further to other clusters. Since this router has 'knowledge' of the other clusters. When routers are available in clusters there should be always one default router.

Default IP router for EV (disabled or OFF)
If the configured router is not the default router, you can configure one or more routers yourself.
Clicking **OFF** the yellow light gives you the possibility to select [**New...**].



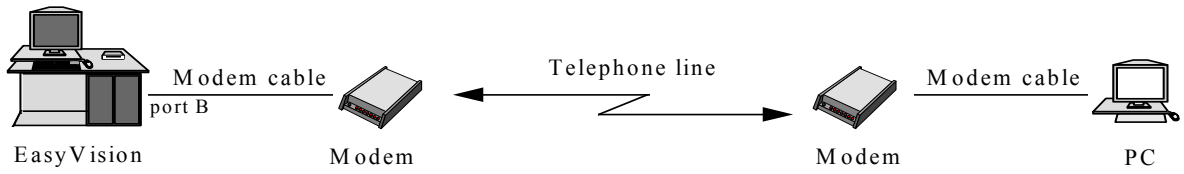
IP network address
This is meant for entering an IP network address or netmask for which this router routes.
As a rule the netmask can be used ending with **0**, meaning that this router routes for all nodes that meet this netmask.

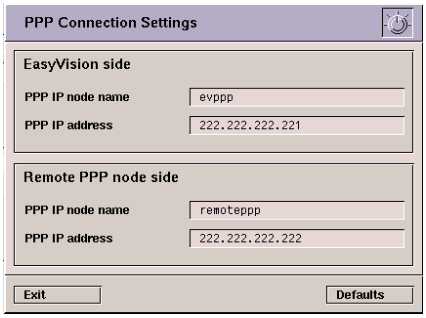
When configuring the EasyVision is done continue with paragraph **Executing the configuration** on page 65 to finalize the configuration or continue to configure other modalities, EasyVisions, DICOM nodes etc.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

8.5.1.3 PPP Connection Settings

Point-to-Point Protocol. If a modem is connected to the EasyVision, the settings must be entered.





At the EasyVision side
Enter the PPP IP node name and PPP IP address.

At the Remote PPP side
Enter the PPP IP node name and PPP IP address.

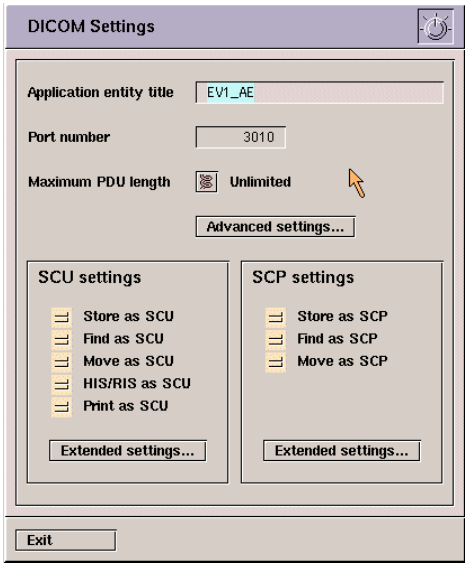
Defaults
Clicking to this button results in the settings as shown.

How to login from the remote computer is described in the Service Manual “Remote Service”.

8.5.1.4 DICOM Settings

These settings are the DICOM settings for the EasyVision itself. Compared to configuring a DICOM node, there are no HIS/RIS possibilities as SCP and it is not possible to print as SCP, but as SCU. In most cases the default values are correct. The AE title is freely selectable.

For further information on the Extended settings for SCU and SCP please refer to chapter **Extended DICOM Settings** on page 95.

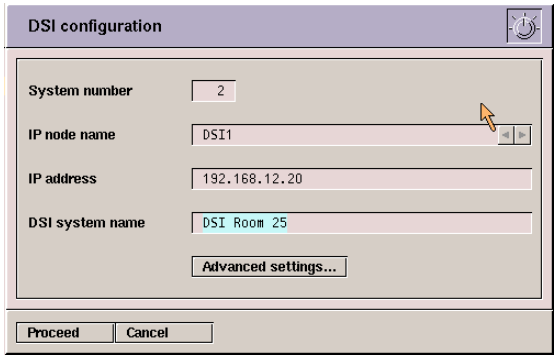


See also: **Advanced settings** on page 93 and **DICOM Background** on page 101.

Copyright © 2004 Philips Medical Systems

8.5.2 DSI

Note: DSI systems supporting DICOM should be configured as DICOM node.



System number
Sequential identification number within the cluster for the involved system.

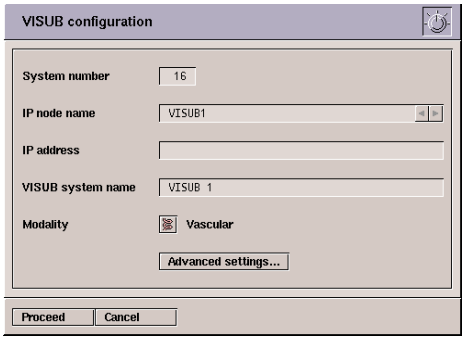
IP node name
Enter a unique name of the DSI system.

IP address
Enter the IP address of the DSI system.

DSI system name
Can be freely chosen, appears within the application

Advanced settings...
The default values are correct for most cases. See paragraph **Advanced settings** on page 93.

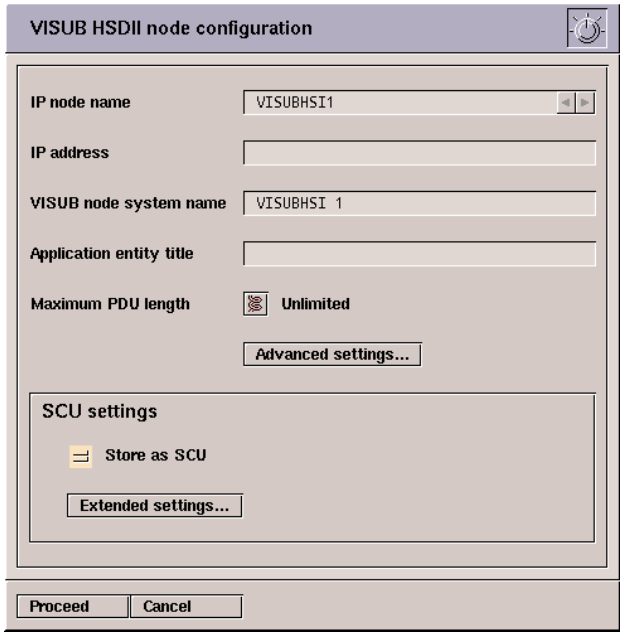
8.5.3 VISUB



Advanced settings...
The default values are correct for most cases. See paragraph **Advanced settings** on page 93.

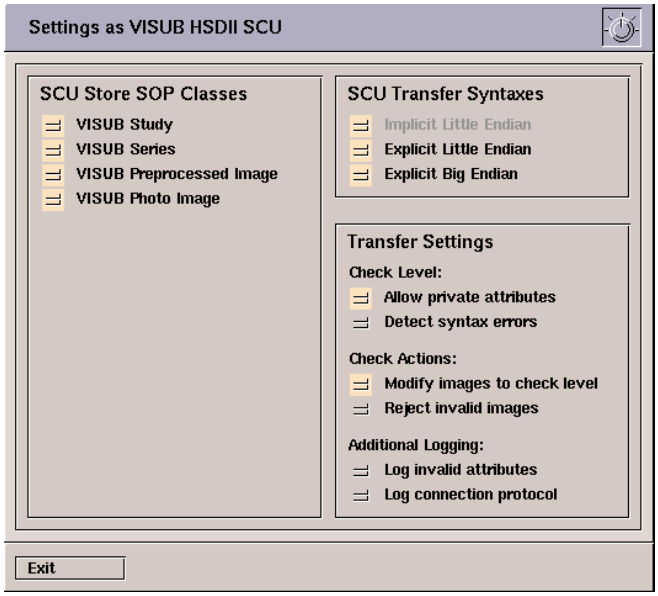
Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

8.5.4 VISUB via HSDII



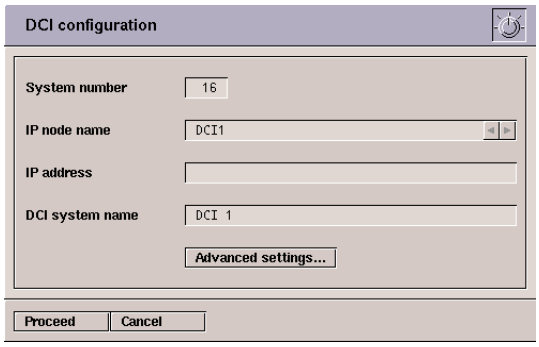
Advanced settings...
The default values are correct for most cases. See paragraph **Advanced settings** on page 93.

Extended settings
The default values are correct for most cases. Click [**Extended settings**] to open the Extended Settings window:



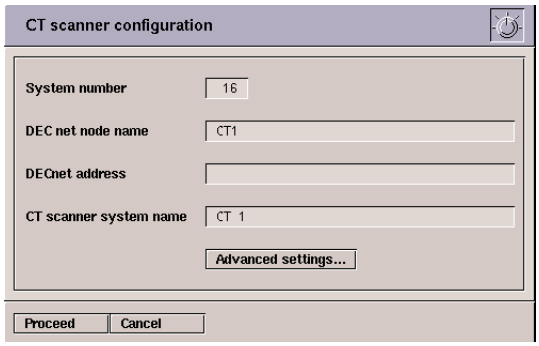
Copyright © 2004 Philips Medical Systems

8.5.5 DCI



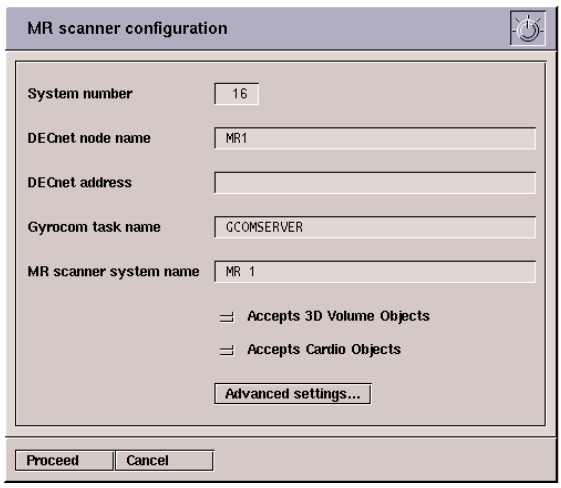
Advanced settings...
The default values are correct for most cases. See paragraph **Advanced settings** on page 93.

8.5.6 CT scanner



Advanced settings...
The default values are correct for most cases. See paragraph **Advanced settings** on page 93.

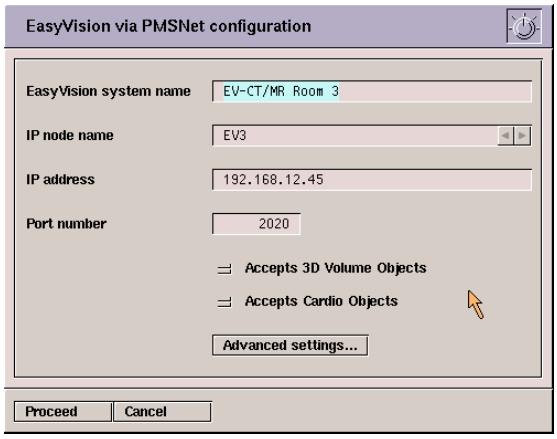
8.5.7 MR scanner



Advanced settings...
The default values are correct for most cases. See paragraph **Advanced settings** on page 93.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

8.5.8 EasyVision via PMSNet



When to use this panel:
To establish a connection with:

- an EasyVision of another type and release, which does not support DICOM (e.g. older releases from R/F and CT/MR, Rad).
- an EasyGuide Neuro workstation.

EasyVision system name
Enter a unique name within the cluster; it is visible within the application.

IP node name
Enter a unique node name for the EasyVision from/to the images are transferred.

IP address
Enter the IP address of the EasyVision workstation from/to the images are transferred.

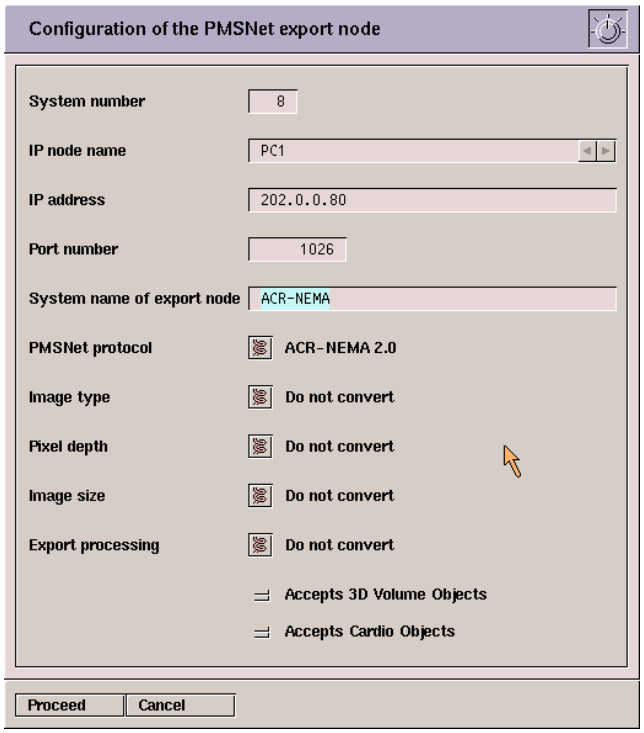
Port number
Enter the port number of the system from/to the images are transferred. See table.

EasyVision type and release	Port number
EV CT/MR ≤ R1.2 level x	1026
EV CT/MR ≥ R2.1 level x	2020
EV R/F ≤ R1.2 level x	1026
EV R/F ≥ R2.2 level x	2020
EV X-Ray ≥ R3.1 level x	2020
EasyReview R1.2 level x	2020
EV RAD R 2.3	2020

Advanced settings
The default values are correct for most cases. See paragraph **Advanced settings** on page 93.

Copyright © 2004 Philips Medical Systems

8.5.9 PMSNet Export Node



This panel is used to configure a PMSNet Export node (e.g. a PC, Macintosh or Sun system running the PMSNet protocol)

System number
Sequential identification number for the system.

IP node name
Enter a unique node name of the PMSnet export destination.

IP address
Enter the IP address of the PMSnet export destination.

Port number
Enter the port number of the system to which the images are exported. If the PMSNet ExportServer software is running on the export node then refer to the User Guide of that program.

System name of export node
Can be chosen freely, is used during normal operation.

PMSNet protocol
Protocol selection can be made between ACR-NEMA 2.0 and SPI-P release 2.

Image type
Select one of the options if images have to send from the EasyVision database to an export node as secondary captured images (“frozen” images). These are pixel maps on which no image manipulations are possible anymore (also called “photo” images). You can send them with (include) or without (exclude) graphics. DCI and VISUB images are to be recognized as XA images.

Pixel depth
Number of bits allocated for each pixel sample. Each sample shall have the same number of bits allocated. 8 or 12 bits.

Image size
Possibility to convert images to an export node with a fixed different pixel format. Dependent on what the export node can handle.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

Export processing
Possibility to convert (or not) raw data on export from the database from the EasyVision to an export node.

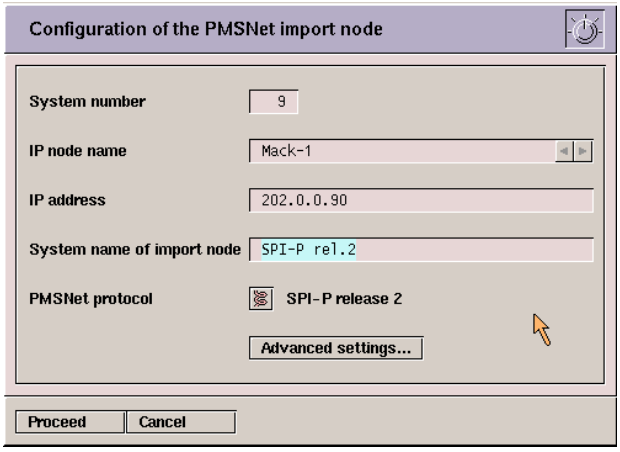
Accepts 3D Volume Objects
Applicable to the transfer from EasyVision to a remote PMSNet node or a Gyrocom station. 3D Volume objects are send by the EasyVision if selected.

Accepts Cardio Objects
Applicable to the transfer from EasyVision to a remote PMSNet node. Cardio objects are send by the EasyVision if selected.

NOTE

Selection of the available options has to be done in agreement with the user of the export node, or with the hospital's network administrator. Else select the default settings.

8.5.10 PMSNet Import Node



System Number
Sequential identification number for the system.

IP node name
Enter a unique node name of the PMSnet import destination.

IP address
Enter the IP address of the PMSnet import destination.

System name of import node
Can be chosen freely; are used during customizing and within the application program.

PMSNet protocol
Selection of the right protocol has to be done in agreement with the owner of the import node, or with the network administrator; else select the default setting. Selection can be made between SPI-P release 2 and ACR-NEMA 2.0

Advanced settings...
The default values are correct for most cases. See paragraph **Advanced settings** on page 93.

Selection of the available settings has to be done in agreement with the user of the export node, or with the hospital's network administrator. Else select the default settings.

Copyright © 2004 Philips Medical Systems

8.5.10.1 THORAVISION

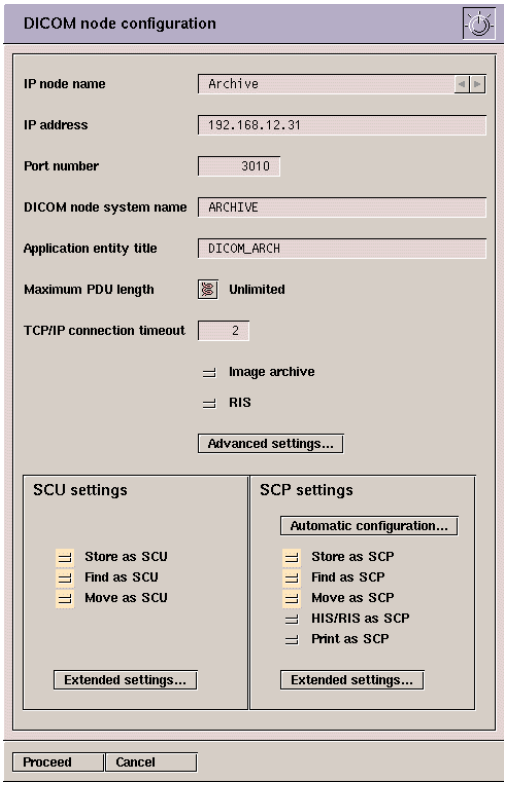
When **THORAVISION** is included in the cluster you may use the PMSNet protocol for transferring images.

If you are using PMSNet there are different port numbers for THORAVISION according the functionality:

Function	EasyVision Port number
Like received	2020
Store and Print	2021
Store and Archive	2022
Store, Print and Archive	2023
Store and Export	2028

Note: This functionality has been imported from R 2.3 but was never tested within R4.2. but it should work without any problem.

8.5.11 DICOM Node



This panel must be used when images are transferred between an EasyVision RAD R4.2 and a DICOM node or older EasyVision releases supporting DICOM (e.g. ≥ R2.3). If the EasyVision is already configured on the remote DICOM node and that DICOM node is started up then **Automatic configuration** can be used.

See also chapter **DICOM Background** on page 101.

IP node name
Enter the node name for the remote DICOM system from/to the images are transferred.

IP address
Enter the IP address of the remote DICOM system from/to the images are transferred.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

Port number
Enter the port number of the remote DICOM system from/to the images are transferred. (EasyVisions listen on port 3010).
DICOM node system name
Enter a unique name for the system from/to the images are transferred; it is visible within the application.

Application entity title
The EasyVision uses this “AE title” to address the remote DICOM node. Refer to the DICOM conformance statement (Chapter “Configuration”) of the remote node for this name.

Maximum PDU length
Select the maximum length of the “Protocol Data Unit” accepted by the remote DICOM node. The EasyVision does not send PDU’s with a greater length to this DICOM node. For DICOM transfer with GE-systems it is recommend to select 65536 bytes.

TCP/IP connection time out.
Default 2 seconds. Change only when using ISDN or if timeouts occur during image transfers.

Image archive
When **Image Archive** is activated an image is marked as **exported** within the application when it has been sent to this DICOM archive. For DICOM image archives only.

RIS
Only to be switched ON if this DICOM node is a Radiology Information System.

Advanced settings...
See paragraph **Advanced settings** on page 93.

Extended settings
The DICOM standard includes a broad selection of services and options. Therefore, configuring a DICOM node means not only filling in the node name etc., but also selecting the right subset of services for the remote DICOM node. EasyVision can select a correct set of services **automatically** when the remote DICOM node is accessible on the net as a DICOM node (see **Auto Configure...)**. Alternatively, you have to do the configuration **manually** with help of the “DICOM Conformance Statement” of the remote DICOM node. Please refer also to chapter **Extended DICOM Settings** on page 95.

Automatic configuration
Clicking this button starts an automatic configuration process. The remote DICOM node must be in operation. All necessary DICOM settings are filled in automatically for that node, if possible.

If the remote DICOM node is not accessible an error message is displayed and **Auto Configure..** does not work. You have to fill in the configuration items manually. This is done via the panels **SCU Settings** and **SCP Settings**.

If the “DICOM Conformance Statement” of the remote node is not available, leave all default settings unchanged. The DICOM node is fully operational. The only risk is that the DICOM node may wrongly be identified as import or export node within the application. Before you can use **Auto Configure** you first have to complete the configuration procedure for this station and for the remote DICOM station.

NOTE

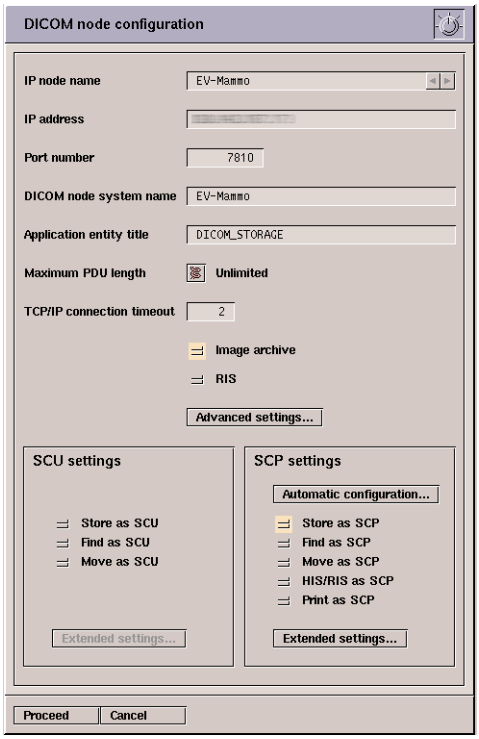
AE titles must be unique. An exception is made for MR scanners, because they may have a fixed AE title. For EasyVisions the AE title must be unique!

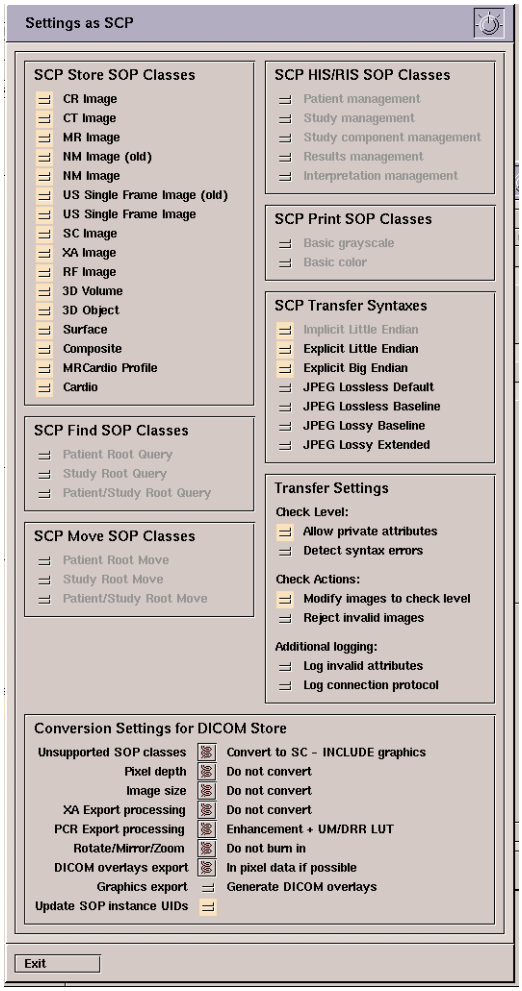
Copyright © 2004 Philips Medical Systems

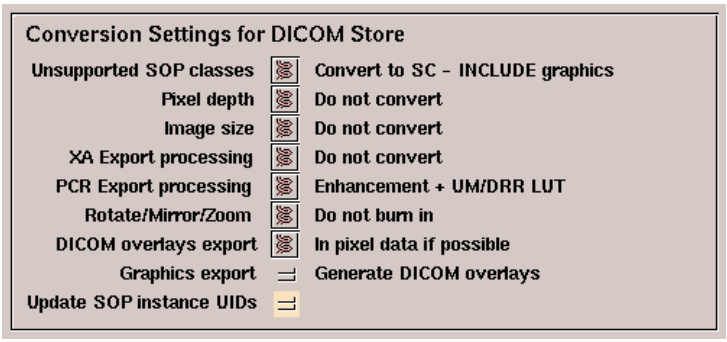
8.5.11.1 EasyVision Mammo

A connected EasyVision Mammo must be configured as DICOM node. Use

Port number: 7810
AET: DICOM_STORAGE







EasyVision Rad does't need to be configured on the EV Mammo. All you need to configure is either

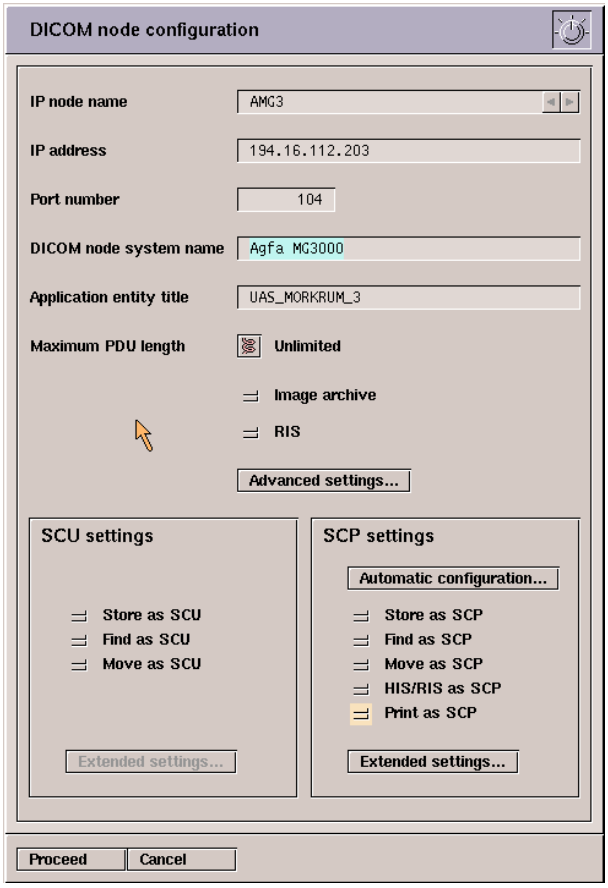
- add the EV RAD's IP name and address to **\WINNT\system32\drivers\etc\hosts** or
- check "**Allow unknown hosts**" at the **DICOM Server Toolbox** in **WISE Tools**

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

8.5.12 DICOM Printer

A DICOM printer is a network printer, which is able to print out images sent by modalities or workstations according to the DICOM standard.

Configuring a DICOM printer:
- Configure a new DICOM node for the DICOM printer.
- Configure the **peripheral settings** of the EasyVision. See paragraph **Configuring printers** on page 76.



Attention

Always configure a DICOM printer on that EasyVision RAD from which the print service is used. Don't configure a DICOM printer as a remote printer via another EasyVision.
This causes problems and confusion on all EasyVision nodes using this printer.

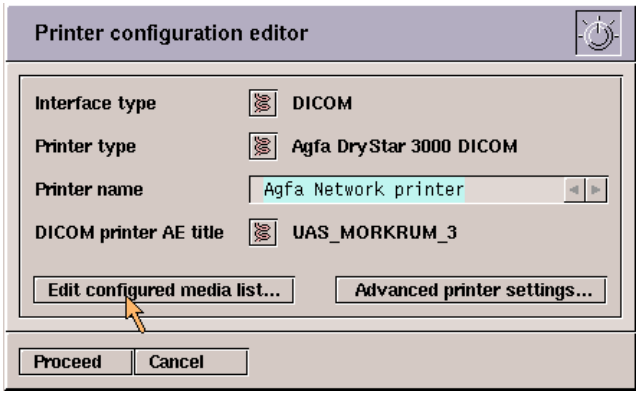
Application entity title
Must be unique in the network and must be provided by the supplier of the DICOM printer.
Case sensitive!

SCU settings
Disable all highlighted SCU options

SCP settings
Disable all highlighted SCP options, and enable **Print as SCP**.

When finished, click [**Proceed**]. Then select the EasyVision configuration panel of the EasyVision for which the printer is to be configured. Click [**Peripheral Settings...**], and [**New...**] from **printers.**

Copyright © 2004 Philips Medical Systems



Interface type
Must be set to DICOM

Printer type
Select the DICOM printer from the list.

Printer name
Up to you

DICOM printer AE title
Select the AE title

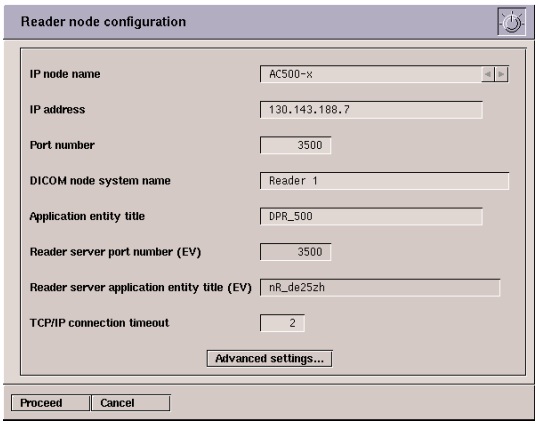
Edit configured media list...
See paragraph **Configuring printers** on page 76.

Advanced printer settings...
For further information, see also chapter **Advanced Printer Configuration** on page 105.

8.5.13 Reader Node

PCR Readers must be configured as **Reader Node**.

When the Reader is a Compano, CosimaX or Corado do not use IP address and name of the Reader itself, use address and name of the PCR Preview Unit instead.



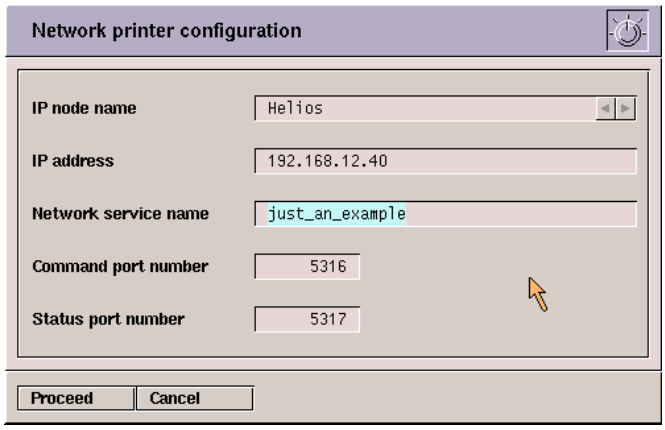
Port number and **Reader server port number (EV)** are fixed values**.**
Reader server Application Entity Title is an entry generated by the EV: **nR_<EV IP node name>**

Refer also to paragraph **Advanced settings** on page 93.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

8.5.14 Network Printer

A Network Printer is **not a DICOM printer** : refer to chapter **DICOM Printer** on page 91.



IP node name
Must be the same as the node name of the network printer to which the images are exported.

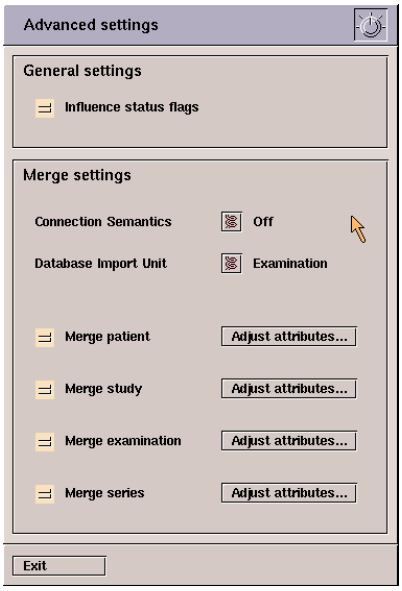
IP address
Must be the same as the IP address of the network printer to which the images are exported.

Network service name
An identifying name. The name is just an identifier and can be freely chosen.

Command port number
The port number of the printer to which commands are sent. The supplier of the network printer must provide this port number.

Status port number
The port number of the printer from which the status information is obtained. The supplier of the network printer must provide this port number.

8.5.15 Advanced settings



Copyright © 2004 Philips Medical Systems

General settings

Influence status flags

When this flag is set the states **P**rinted, **A**rchived, **E**xpired are reset when a new image is imported for an existing patient. This flag is set by default. When this flag is not set the states are kept and not reset.

Merge settings

The merge settings influence the merge behavior of the database.

Connection semantics

On every internal connection this flag indicates how to merge the received set in this connection (patient, study or examination based).

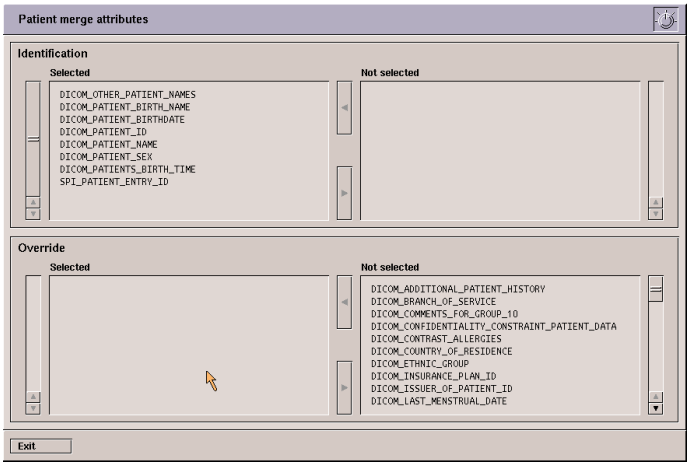
Database import unit

The unit size, which is visible in the database when importing. This can base on **patient**, **study** or **examination**. For example: examination; signifies that the received set is merged as a new examination in an existing set in the database.

Merge patient, Merge study, Merge examination, Merge series:

An example for **Merge Patient**:

Clicking [**Adjust attributes...**] displays the following panel.



When patients with the same name must be merged on import (by clicking [**Merge Patient**] in the Advanced settings panel) the following can be selected:

- the identification criteria on which a patient name should merge (default as shown in the panel above).
- what image attributes should override the attributes from the existing images (default = none, as in the panel above).

The same selections can be made for:

- Merge study
- Merge examinations
- Merge series

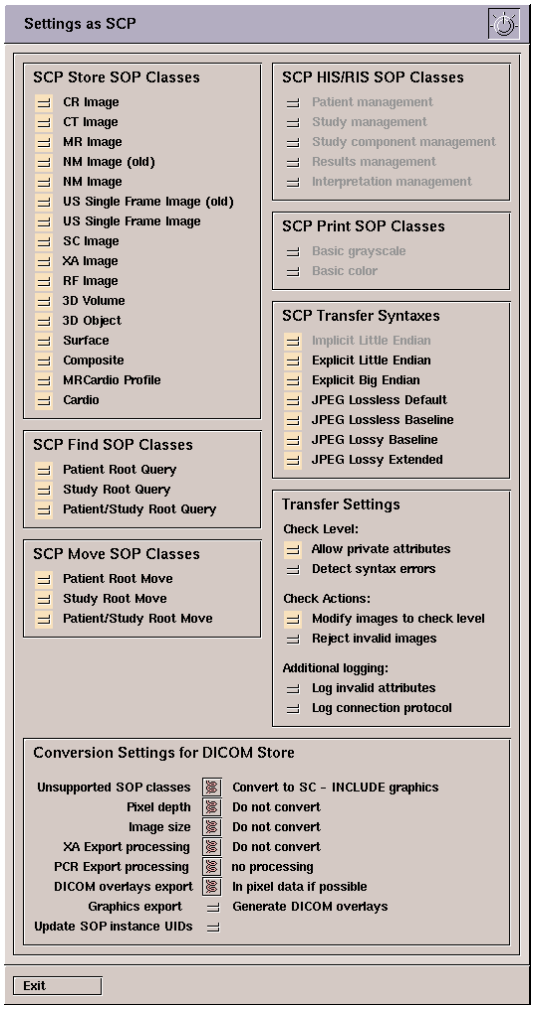
Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

9 EXTENDED DICOM SETTINGS

The EasyVision DICOM capabilities are specified by the “DICOM Conformance Statement” (4522 220 84552). There is also a document available “How to read a DICOM Conformance Statement” (4522 983 67151).

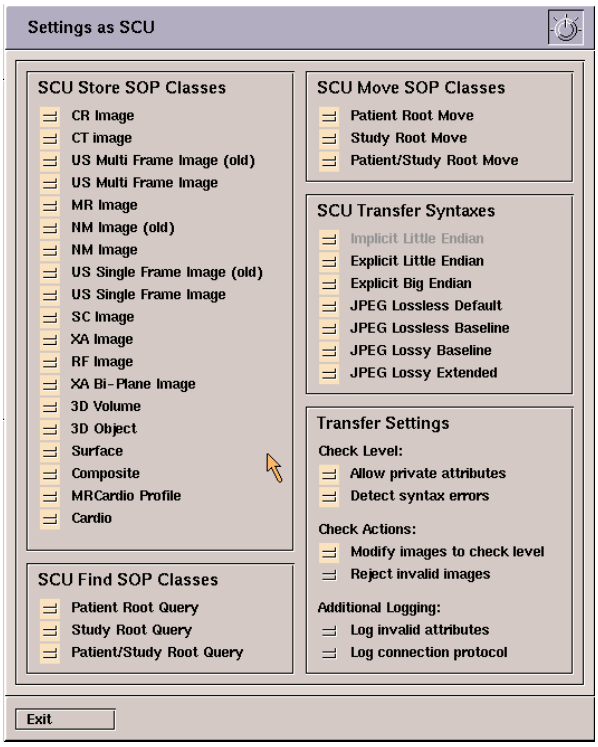
See also chapter **DICOM Background** on page 101.

The panel of Extended Settings as SCP:



Copyright © 2004 Philips Medical Systems

The panel of Extended Settings as SCU:



9.1 STORE SOP CLASSES

Select the SOP classes as described by the DICOM Conformance document of the concerned DICOM node.

If this document is not available then switch off all image types, which do not belong to the involved modality.

9.2 FIND & MOVE SOP CLASSES

Three standard Query/Retrieve Information Models are defined for EasyVision. Each Query/Retrieve Information Model is associated with a number of SOP Classes. The following three hierarchical Query/Retrieve Information Models are defined:

- Patient Root
- Study Root
- Patient/Study Only

Patient Root
The Patient Root Query/Retrieve Information Model is based upon a four level hierarchy:

- Patient
- Study
- Series
- Image

The Patient level contains the identification and demographic information about the patient to which a study belongs. Because more than one study of a patient can exist, the patient level is the highest level (when all the information collected for a single patient is taken in account).

A Study is the result of a request for a certain type of examination. All the activities in a radiology department centre on the correct handling of the study. At study level identification information is kept and it can also contain references to information related to the same study in an administration system.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

Below the study level all the Series of images are collected. The Series level identifies the modality type creating the images; the date/time when the series was made, and details about the examination type and equipment used.

The lowest level is the Image level. Each image contains acquisition and positioning information as well as the image data itself. Depending on the type of modality, the image level contains data for one image (single), two images (biplane system) or a collection of images taken in a single gathering of image data in a relative short period of time (multi-frame images).

The use of multi-frame images saves duplication of information at the higher levels, but is only possible when the relationship between the frames can be described in a simple manner. For example, the increments in the movements of the system and time are equal for all the single frames.

Study Root
The Study Root Query/Retrieve model is identical to the Patient Root Query/Retrieve Model except the top level is the study level. Attributes of patients are considered to be Attributes of studies.

Patient/Study Only
The Patient/Study Only Query/Retrieve model is identical to the Patient Root except the series and image levels are not supported.

9.3 TRANSFER SYNTAX

Transfer Syntax is an attribute of a Presentation Context (e.g. byte ordering, compression), one or more of which are negotiated at the establishment of an Association between DICOM Application Entities.

Little Endian
Little Endian byte ordering is defined as follows:

In a binary number consisting of multiple bytes (e.g. a 32-bit unsigned integer value, the Group Number, the Element Number, etc.), the least significant byte shall be encoded first; with the remaining bytes encoded in increasing order of significance.
In a character string consisting of multiple 8-bit single byte codes, the characters will be encoded in the order of occurrence in the string (left to right).

Implicit:
DICOM defines default Transfer Syntax, the DICOM Implicit VR Little Endian Transfer Syntax, that shall be supported by every conformant DICOM Implementation.

Explicit:
This Transfer Syntax applies to the encoding of the entire DICOM Data Set. This implies that when a DICOM Data Set is being encoded with the DICOM Little Endian Transfer Syntax some requirements (according the DICOM standard) shall be met.

Big Endian
Big Endian byte ordering is defined as follows:
In a binary number consisting of multiple bytes, the most significant byte shall be encoded first; with the remaining bytes encoded in decreasing order of significance.
In a character string consisting of multiple 8-bit single byte codes, the characters will be encoded in the order of occurrence in the string (left to right).

JPEG
DICOM provides a mechanism for supporting the use of JPEG Image Compression through the Encapsulated Format.

The context where the usage of lossy compression of medical images is clinically acceptable is beyond the scope of the DICOM Standard. The policies associated with the selection of appropriate compression parameters (e.g. compression ratio) for JPEG lossy compression is also beyond the scope of this standard.

Copyright © 2004 Philips Medical Systems

9.4 TRANSFER SETTINGS

These settings are applicable to all transfers, import or export, which are initiated by this DICOM node as SCU.

If the DICOM node is unknown, then keep the default settings unchanged with 1 exception: Do not allow the Private attributes; these must be switched off.

Check Level: Two checks may be enabled:

- **Allow Private attributes**: if this setting is not selected, all NON-DICOM attributes will be removed from the images.
- **Detect Syntax errors**: check the values of all attributes against the DICOM specification.

As a result of these checks the following actions and / or logging can be selected:

Check Actions: the response on a failed check can be chosen:

- **Modify image**: try to repair any missing or superfluous attributes or syntax errors (e.g., construct DICOM attributes from PMSNet attributes).
- **Reject invalid images**: Reject images with missing or superfluous DICOM attributes or syntax errors. The transfer is stopped after the rejected image, so the remaining images of the job are not transferred.

These actions can be combined, which means that if the modification fails the image will be rejected.

Additional Logging
Logging of errors is always done. When setting up communication with a DICOM node for the first time, set the following two logging options to "on"; after communication is established you may switch them to "off":

- **Log invalid attributes**: log all missing or superfluous DICOM attributes or syntax errors to the log file: /var/adm/cdslog/networkServer_network_<hostname>
- **Log connection protocol**: all logging with respect to the DICOM function "Query" is written to the log file: /var/adm/cdslog/networkServer_network_<hostname>

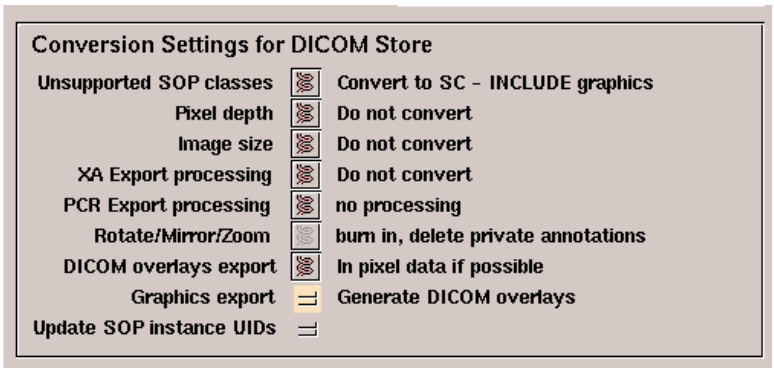
Exception: all logging with respect to the DICOM function "Query" is written to the log file: **/var/adm/cdslog/uiDataHandling** log file.

Examples of DICOM settings and the results.

Allow private attributes	Modify images to check level	Reject invalid images	Result
off	on	on	Stop transfer from this node at an image with a invalid attribute which cannot be repaired and filter non-DICOM attributes.
on	on	on	Stop transfer from this node at an image with an invalid attribute, which cannot be repaired.
off	on	off	Transfer from this node is done for all images (which may also include private attributes).

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

9.4.1 SCP: Conversion Settings for DICOM Store



Unsupported SOP classes

Do not convert	**...**
Convert to SC – EXCLUDE graphics	**...**
Convert to SC – INCLUDE Graphics	Recommended

Pixel Depth

Do not convert	Recommended
Convert to 8 bits **Convert to 12 bits** **Convert to 8 to 12 bits**	not for diagnosis, JPEG involving losses; for viewing only

Image Size

Do not convert	Recommended

XA Export processing

Do not convert	Recommended

Graphics export

Generate DICOM overlays	**Enabled**: A DICOM overlay is generated from EV private graphics (if any) and exported. **Disabled**: No DICOM overlay is generated.

PCR Export processing

no processing:	Images are exported as “raw” images (**Rotate/Mirror/Zoom** is not selectable)
Enhancement:	Images are transmitted with DRR/UM enhancement enclosed, no LUT applied
Enhancement + UM LUT:	The special UM-LUT (A-O) is applied
Enhancement + UM/DRR LUT:	Images are transmitted containing the UM LUT and DRR LUT

Rotate/Mirror/Zoom

only selectable when **PCR Export processing** is set to "Enhancement".

do not burn in	Re-orientation and zoom are not "burned in" and not exported with the image. Annotations are exported.
burn in, delete private annotations	Re-orientation and zoom are "burned in" and exported with the image. Annotations are not exported.

DICOM overlays export

This option applies to both DICOM overlays that are already present with the image being exported and DICOM overlays being generated according to the setting of **Graphics export**.

In separate planes	Any exported DICOM overlays reside in the overlay data attribute (6000,3000).
In pixel data if possible	Any exported DICOM overlays are embedded in the pixel data attribute (7FE0,0010) if there are free bits. Otherwise the overlays are exported in separate planes.

Copyright © 2004 Philips Medical Systems

Update SOP instance UIDs.

Sometimes DICOM PACS or other DICOM hosts do not accept images sent by the EasyVision because these images are already present in the archive (UID is already defined). This option makes it possible to specify that all images are assigned to a new UID when data is exported to these hosts. As a result the DICOM host can accept the images.

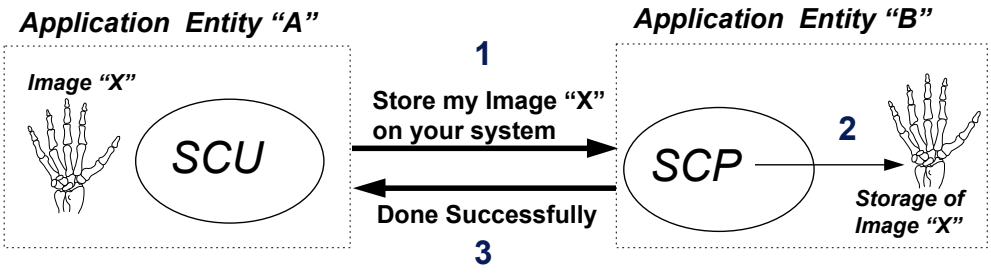
Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

10 DICOM BACKGROUND

10.1 What are SCU and SCP?

An SCU (Service Class User) is using a "service".

An SCP (Service Class Provider) is providing a "service".



10.2 Application Entity

A major issue in networked distributed applications is how applications can contact each other. Arrangements have to be made to address the counterpart and agree about various topics before SOP instances can be exchanged. In DICOM Network partners recognize each other via Application Entities. An Application Entity is that part of a process that deals with the communication. It contains the Service User of the process, containing functions to setup connections and transfer the information. An Application Entity has a name (Application Entity Title) that has to be used when setting up the communication.

The EasyVision uses this "AE title" to address the remote DICOM node. Refer to the DICOM Conformance statement of the remote node for this name.

10.3 Presentation Address

Application Titles are symbolic names for the processes involved in the communication. In a real network a network address has to be provided. This is called the Presentation Address and points to the Application Entity addressed.
The format of the Presentation Address depends on the network protocol used. DICOM networks are in most cases realized using the TCP/IP protocol stack.

In EasyVision the DICOM Association between the Application entities is mapped to a TCP connection. The Presentation Address is mapped to a TCP port number, combined with the IP Number or Host name.

10.4 Port Numbers

Many different protocols (FTP, HTTP, Telnet, DICOM) can use TCP at any time. Using so-called Port Numbers identifies these applications. The combination of TCP port number and **IP number** is called the **Socket Address**.
A TCP connection is defined by the combination of the local Socket Address and the remote Socket Address. By keeping the IP numbers network wide unique and the TCP port number unique inside a system, each TCP connection is uniquely identified by the combination. The management of connections is done by a facility called the Socket Interface which provides functions to setup connections, transfer byte streams, etc.
The TCP port of the partner called during a connection initialization must be known. This can be either an agreed port number between two applications. The EasyVision for instance listens to port number 3010.

10.5 Query/Retrieve SOP Classes

Three standard Query/Retrieve Information Models are defined for EasyVision. Each Query/Retrieve Information Model is associated with a number of SOP Classes. The following three hierarchical Query/Retrieve Information Models are defined:

- Patient Root
- Study Root
- Patient/Study Only

Copyright © 2004 Philips Medical Systems

Patient Root
The Patient Root Query/Retrieve Information Model is based upon a four level hierarchy:
- Patient
- Study
- Series
- Image

The **Patient** level contains the identification and demographic information about the patient to which a study belongs. Because more than one study of a patient can exist, the patient level is the highest level (when all the information collected for a single patient is taken in account).

A **Study** is the result of a request for a certain type of examination. All the activities in a radiology department centre on the correct handling of the study. At study level identification information is kept and it can also contain references to information related to the same study in an administration system.

Below the study level all the **Series** of images are collected. The Series level identifies the modality type creating the images; the date/time when the series was made, and details about the examination type and equipment used.

The lowest level is the **Image** level. Each image contains acquisition and positioning information as well as the image data itself. Depending on the type of modality, the image level contains data for one image (single), two images (biplane system) or a collection of images taken in a single gathering of image data in a relative short period of time (multi-frame images).
The use of multi-frame images saves duplication of information at the higher levels, but is only possible when the relationship between the frames can be described in a simple manner. For example, the increments in the movements of the system and time are equal for all the single frames.

Study Root
The Study Root Query/Retrieve model is identical to the Patient Root Query/Retrieve Model except the top level is the study level. Attributes of patients are considered to be Attributes of studies.

Patient/Study Only
The Patient/Study Only Query/Retrieve model is identical to the Patient Root except the series and image levels are not supported.

NOTE

Even though this model does not include the image level, images may be retrieved at the patient and study level (i.e., retrieve all images for a Patient or Study).

10.6 Transfer Syntax

The Transfer Syntax is a set of encoding rules able to unambiguously represent one or more Abstract Syntax's. In particular, it allows communicating Application Entities to negotiate common encoding techniques they both support (e.g., byte ordering, compression, etc.).
Transfer Syntax is an attribute of a Presentation Context, one or more of which are negotiated at the establishment of an Association between DICOM Application Entities.

Little Endian
In a binary number consisting of multiple bytes (e.g. a 32-bit unsigned integer value, the Group Number, the Element Number, etc.), the least significant byte shall be encoded first; with the remaining bytes encoded in increasing order of significance.
In a character string consisting of multiple 8-bit single byte codes, the characters are encoded in the order of occurrence in the string (left to right).

Implicit:
DICOM defines default Transfer Syntax, the DICOM Implicit VR Little Endian Transfer Syntax, that shall be supported by every conformant DICOM Implementation.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

Explicit:
This Transfer Syntax applies to the encoding of the entire DICOM Data Set. This implies that when a DICOM Data Set is being encoded with the DICOM Little Endian Transfer Syntax some requirements (according the DICOM standard) shall be met.

Big Endian
In a binary number consisting of multiple bytes, the most significant byte shall be encoded first; with the remaining bytes encoded in decreasing order of significance.
In a character string consisting of multiple 8-bit single byte codes, the characters are encoded in the order of occurrence in the string (left to right).

JPEG
DICOM provides a mechanism for supporting the use of JPEG Image Compression through the Encapsulated Format.

NOTE

The context where the usage of lossy compression of medical images is clinically acceptable is beyond the scope of the DICOM Standard. The policies associated with the selection of appropriate compression parameters (e.g. compression ratio) for JPEG lossy compression is also beyond the scope of this standard.

10.7 Transfer Settings

These settings are applicable to all transfers, import or export, which are initiated by this DICOM node as SCU. We strongly advise to keep the default settings unchanged.

Check Level: Two checks may be enabled:

- **Allow Private attributes:** if this setting is not selected, all non-DICOM attributes are removed from the images.
- **Detect Syntax errors:** check the values of all attributes against the DICOM specification.

As a result of these checks the following actions and / or logging can be selected:

Check Actions: the response on a failed check can be chosen:

- **Modify image:** try to repair any missing or superfluous attributes or syntax errors (e.g., construct DICOM attributes from PMSNet attributes).
- **Reject invalid images:** Reject images with missing or superfluous DICOM attributes or syntax errors. The transfer is stopped after the rejected image, so the remaining images of the job are not transferred.

These actions can be combined, which means that if the modification fails the image are rejected.

Additional Logging
Logging of errors is always done. When setting up communication with a DICOM node for the first time, set the following two logging options to “on”; after communication is established you may switch them to “off”:

- **Log invalid attributes:** log all missing or superfluous DICOM attributes or syntax errors to the log file: /var/adm/cdslog/networkServer_network_<hostname>
- **Log connection protocol:** all logging with respect to the DICOM function “Query” is written to the log file: /var/adm/cdslog/networkServer_network_<hostname>

Exception: all logging with respect to the DICOM function “Query” is written to the log file: **/var/adm/cdslog/uiDataHandling** log file.

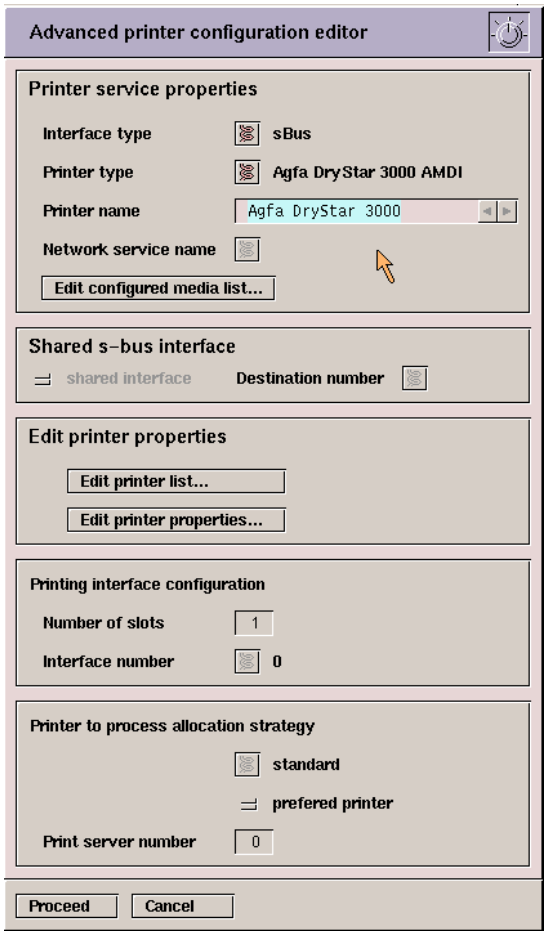
Copyright © 2004 Philips Medical Systems

Examples of DICOM settings and the results.

Allow private attributes	Modify images to check level	Reject invalid images	Result
off	on	on	Stop transfer from this node at an image with an invalid attribute which cannot be repaired and filter non-DICOM attributes.
on	on	on	Stop transfer from this node at an image with an invalid attribute, which cannot be repaired.
off	on	off	Transfer from this node is done for all images (which may also include private attributes).

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

11 ADVANCED PRINTER CONFIGURATION



The advanced printer configuration is an extension of the standard printer configuration editor. It extends the standard printer configuration editor with the following options:

Shared Sbus interface
Obsolete

Edit printer properties
- Edit printer list: starts the printer list editor
- Edit printer properties: to start the printer property editor.

Printing interface configuration
This extension is only for S-Bus and SCSI printers. It shows the number of slots and the interface number for the selected interface type. For the current release the number of slots is fixed to one.

Printer to process allocation strategy
This extension shows the mapping of the print services to UNIX processes. For this release only the standard mapping is available. The standard mapping maps all non-preferred printers to process 0 and all preferred printers to process 1. The preferred option is part of this.

Preferred printer
If this selection is activated the system assigns a separate print server job to that particular printer. It has the effect that hanging of other printers doesn't have any effect on the preferred printer.

Printer list editor
The printer list editor offers an interface to load and store in ASCII files. The intention of these files is that they can be used in communication with PCR development in Hamburg in case of problems. The editor panel offers a field to enter a file name (full path name).

Copyright © 2004 Philips Medical Systems

Other functions are:

Save printer settings: save the printer settings of the currently selected printer.

Load printer settings: load the printer settings from file for the currently selected printer.

Load printer list: load the list of supported printers from file.

Reset printer list: replace the list of supported printers with the list that was part of the **release**. This acts as a reset of the list of supported printers.

Printer property editor

This panel shows detailed settings of the printer configuration.

1. Manufacturer
2. Model
3. Protocol
4. Interface type
5. Device node name: the UNIX device node name
6. Network service name
7. Media list

In the list of media a medium can be selected. The details of the selected medium are shown in the lower part of the panel. The selected medium can be edited by editing the fields. For printing to file the selected medium can:

- copy edit: a copy of the selected medium is made and selected for editing.
- delete: the selected medium id deleted.

The fields of the selected medium are:

1. medium name: editable.
2. medium size name: editable for printing to file.
3. medium type name: editable for printing to file.
4. medium size X and Y in pixels: editable for printing to file.
5. resolution: editable for printing to file.
6. color model.
7. configured medium option: editable.
8. border margins in pixels of both orientations: editable.
9. to file options .
   - encoding type: editable for printing to file.
   - quality: editable for printing to file.
10. DICOM parameters (see DICOM definitions).
    - Image format.
    - Film orientation.
    - Film destination.
    - Trim option.
    - Configuration.
    - Magnification.
    - Max density.

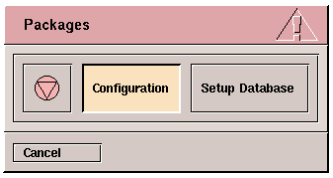
The intention of the panel is to show the details in case of problems (This panel is subject to the non-documented feature: development privilege).

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

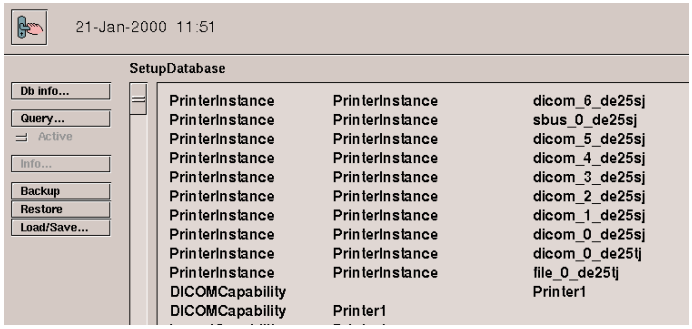
11.1 Adding a new printer using a "Property" or "PrinterPrototype" file

If a certain printer is not listed in the configuration tool among the configurable printers, there is a possibility to add a printer to that list. To achieve that a text file containing the printer properties a so-called **PrinterPrototype.txt** file must be available. The PCR development group in Hamburg may provide such a file.

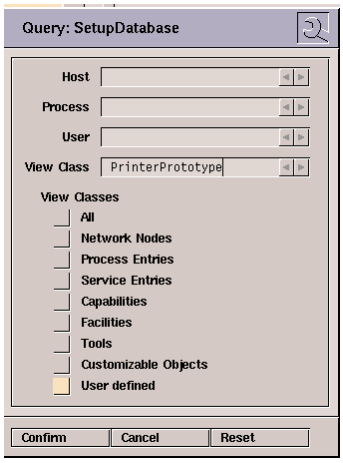
1. Copy this prototype file to the directory **/dbadmin**
2. From the Startup Menu select **4 Go to Installation / Configuration Menu**
3. Select **2 Start Configuration**
4. In the configuration screen click .
5. In the window **Packages** click on **Setup Database**



6. The screen **Setup Database** is displayed.

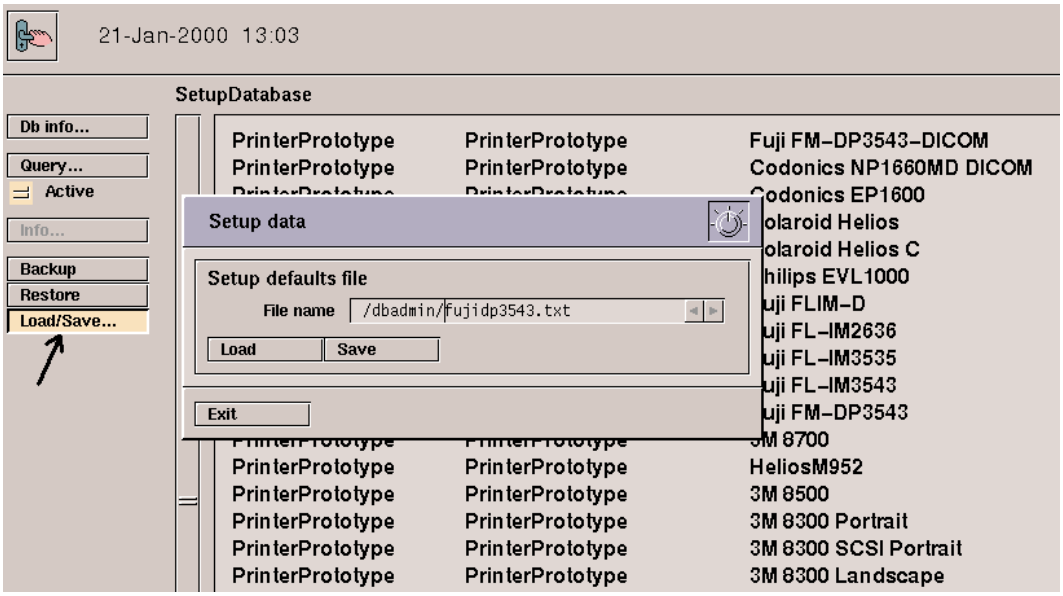


7. Click [**Query...**].



8. In the input field **View Class** enter ***PrinterPrototype***.
9. At **View Classes** select **User defined** then click [**Confirm**].
   A list of printer prototype files is displayed.
10. To add the new file to the list of PrinterPrototype files click [**Load/Save...**]. The Setup data window is displayed.

Copyright © 2004 Philips Medical Systems



11. Enter path and the file name of the new PrinterPrototype file. (Example: /dbadmin/fujidp3543.txt).

12. Click [**Load**] (Only activated if the file exists in the directory /dbadmin) to load the file into the Setup Database.

Now the printer can be configured in the standard way.

Note

The above-described procedure has to be carried out every time the application software is reloaded.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

12 CUSTOMIZING

IMPORTANT:

In case of a new installation and if you do not want to customize now, still a default format must be selected (see the following procedure).

From the start-up menu select **2. Start Customizing.** After about 30 seconds the customizing panel appears.

NOTE

*If no "print protocols are visible, click **[restore PMS settings]** followed by **[Save]**.*
The standard print protocols become visible.

Actions

- Select an "acquisition system" from the "automatic printing" panel
- Select an "application package" from the "print protocols" panel
- Select a "print format" from the list (highlight it)
- Click **default** in the **automatic printing** panel
- Repeat these steps for all available application packages
- Repeat these steps for all available acquisition systems

If an application specialist is available, customizing can be done in consultation with the application specialist and/or with the customer.

The items to customize are:

- The protection mechanism of the image database on this workstation.
- Automatic archiving
- Destinations for remote functions
- User permissions.
- Default application package per workstation.
- Automatic routing of images from the modalities to printers, archives, workstations.
- Automatic reconstruction
- Print protocols
- Automatic printing

NOTE

When finished make a backup according to chapter **Backup and Restore Of Config Files** *on page 110.*

Copyright © 2004 Philips Medical Systems

13 BACKUP AND RESTORE OF CONFIG FILES

This chapter describes how to perform backup and restore for configuration and customization files.

To perform a backup of a complete set of config data refer to paragraph **13.1 Complete backup via Setup Database** below.

To perform a backup of single config files, for instance to transfer processing protocols to another EVRAD, refer to paragraph **13.2 Backing up and restoring single config files**.

13.1 Complete backup via Setup Database

Important: Please refer to **Restoring Setup Database** on page 12 before making a backup of the Setup Database or if you discover problems after restoring the Setup Database.

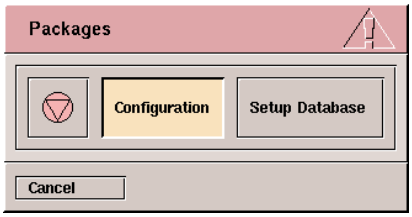
13.1.1 Backing up the Setup Database

Saving the so-called Setup Database can do a backup of **all** config data. The Setup Database contains all information on configuration, customization, printer settings, processing parameters and print layouts.

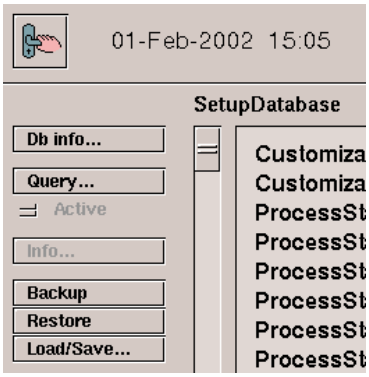
Beside that, the file **/easydata/license.dat** (license keys) should be saved to make a backup complete.

Here is the procedure:

1. Enter the configuration program (see **Starting up the configuration program** on page 64).
2. In the configuration screen click .
3. In the window **Packages** click [**Setup Database**].



4. The screen **Setup Database** is displayed.



5. Click [**Backup**] then [**Confirm**].
   The setup database is exported to the file **/easydata/setupDB.bck**. The file size is about 1.5 MB (see also **Compressing setupDB.bck** below).
6. Click then to leave the configuration program.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

7. Proceed with chapter **Transferring Config And Log Files** on page 116 to save the files to Service PC or floppy disk.

Compressing/Uncompressing setupDB.bck

If the file **setupDB.bck** shall be saved to floppy disk it needs to be compressed in order to fit on the floppy:

1. Go to the command prompt.
2. Change the directory: ***cd /easydata***
3. Enter ***zip setupdb.zip setupDB.bck***
4. The file is packed within seconds to a file named **setupdb.zip** with a size of about 50kB.

To uncompress a file enter ***unzip setupDB.bck setupdb.zip***

13.1.2 Restoring the Setup Database

Attention:
A backup of the setup database cannot be restored when the configuration is empty, e.g. after reloading software. But there is a workaround:

Enter a minimum configuration for the EasyVision node (you may enter useless data like hospital name ***abcdef***, IP address **1.1.1.1** and so on. Then execute the configuration. When done, leave the configuration program and proceed with the procedure described below.

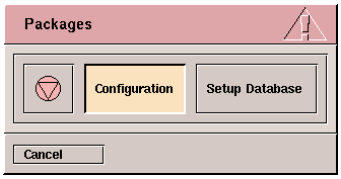
1. Copy the backup file of the Setup Database to the directory **/easydata**
   (see also chapter **Transferring Config And Log Files** on page 116).

   The file name must be **setupDB.bck**.

2. Enter the configuration program (see **Starting up the configuration program** on page 64).

3. In the configuration screen click .

4. In the window **Packages** click [**Setup Database**]. The screen **Setup Database** is displayed.



5. Click [**Restore**] and [**Confirm**] the next window.
6. Restoring the Setup Database may take several minutes (see the clock cursor).
7. When finished, exit the configuration program.
8. Start again the configuration program.
9. Click [**Execute**] to execute configuration and [**Proceed**].
10. When done, exit the configuration program.

Copyright © 2004 Philips Medical Systems

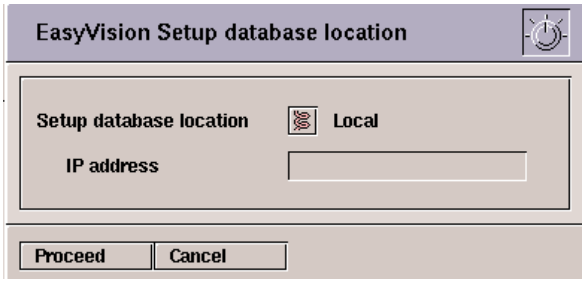
13.2 Backing up and restoring single config files

The following system data can be saved as single files for backup purposes or for transfer to other EasyVisions:

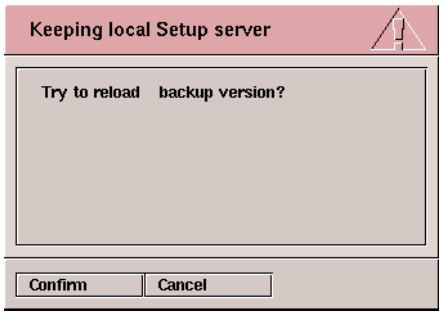
Purpose	File	Contents
configuration*	/easydata/config.cfg	all data of the configuration program
customization*	/easydata/<host ID>.cus	all data of the customization program
license file	/easydata/license.dat	software license keys
printer calibration	/easydata/<host name>.cal	calibration data of all calibrated printers
print protocols	see 13.2.2 Backing up and restoring print protocols	just the print protocols without customization data
processing protocols	see 13.2.1 Backing up and restoring processing protocols	processing protocols for DRR and UM

*) When configuration or customization files have been restored the configuration must be "executed" to write the data to the setup database. See **Executing the configuration** on page 65.

1. Prior restoring single config files it is recommended to delete the existing configuration: At the command prompt enter ***/easy/service/removeConfigFiles*** and confirm with ***Y.*** Make sure you have a backup since **all config data are deleted**.
2. Copy the backup file(s) to the directory **/easydata**.
3. Start the configuration program.
4. Click [**Proceed**].



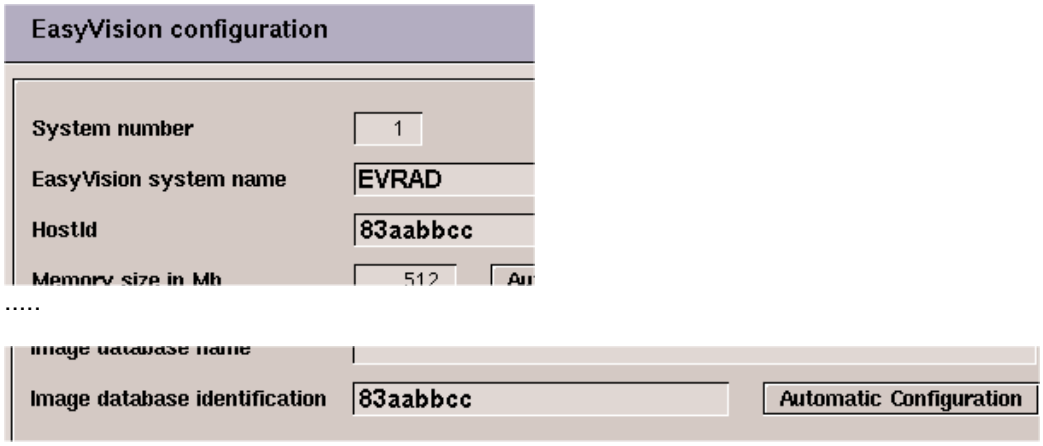
5. Click [**Confirm**].



6. The restored configuration data should now be visible.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

When restoring a *config.cfg* file from another EasyVision the HostID must be changed in the EasyVision node configuration screen and (HostID and Image Database location):



7. Now ***Execute*** the configuration.
8. When done, leave the configuration program.

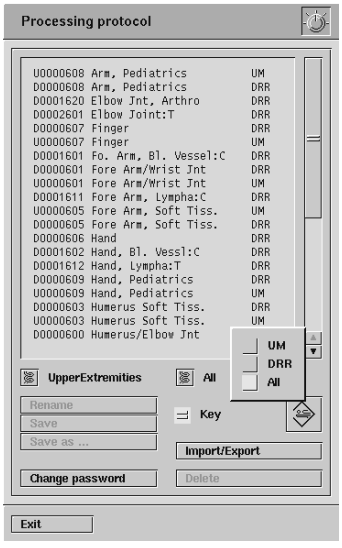
Please refer also to chapter **Transferring Config And Log Files** on page 116 for transferring files to Service PC or floppy disk.

13.2.1 Backing up and restoring processing protocols

The **processing protocols** are embedded in the setup database and not available as a single file. In order to back up the processing protocols as a single file they must be exported within the application software. The file can be restored or loaded onto other EV RADs. The file size is about 1Mbyte.

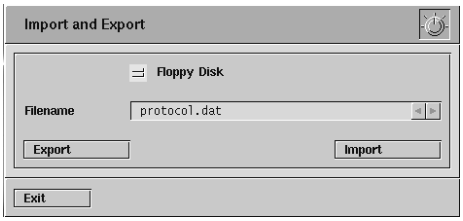
Backup and restore

1. Start the application.
2. Click to open the **Processing protocols** window.
3. Click [**Import/Export**].



Copyright © 2004 Philips Medical Systems

4. The **Import and Export** window appears.



When the Sun computer has a floppy drive (Ultra 5/10) the file can be stored directly to floppy: click **Floppy Disk** and insert an empty DOS formatted diskette into the diskette drive of the Sun computer.

5. In the entry field the file name **protocol.dat** is displayed by default. It is recommended to use this name but any other file name may be used. Use the DOS conventions (8+3 digits) when entering the file name. When exporting the file to hard disk use the path **/easydata** or when using file transfer via USIT: **/easydata/UI**.

6. Click [**Export**] for backing up or click [**Import**] for restoring the processing protocols.
The complete set of processing protocols is saved/loaded.

Please refer to chapter **Transferring Config And Log Files** on page 116 for transferring files to Service PC or floppy disk.

13.2.2 Backing up and restoring print protocols

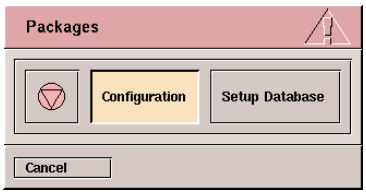
The **print protocols** are embedded in the Setup Database and not available as a single file. In order to save them as a single file they must be exported from the Setup Database. The file can be restored or loaded onto other EV RADs.

13.2.2.1 Backing up print protocols

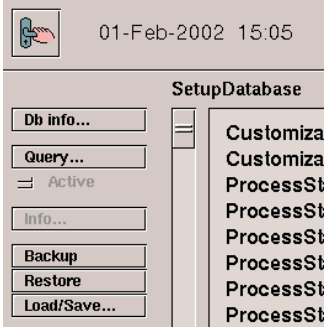
1. Enter the configuration program (see **Starting up the configuration program** on page 64).

2. In the configuration screen click .

3. In the window **Packages** click [**Setup Database**].



4. The screen **Setup Database** is displayed.

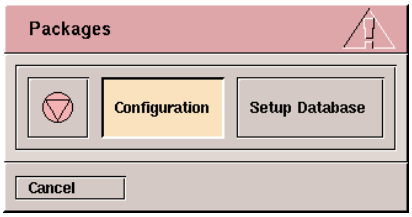


Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

5. With the middle mouse button select all lines named **Customizable Objects PrintProtocols.**
6. Click [**Load/Save**]. The **Setup Data** window opens.
7. In the entry window enter **path and file name** for the backup file, e.g. ***/easydata/printprotocols***
8. Click [**Save**]. The file is stored within a second.
9. Click [**Exit**] then leave the configuration program.

13.2.2.2 Restoring print protocols

1. Enter the configuration program (see **Starting up the configuration program** on page 64).
2. In the configuration screen click .
3. In the window **Packages** click [**Setup Database**].



4. The screen **Setup Database** is displayed.
5. Click [**Load/Save**].
6. In the entry window enter **path and file name** of the backup file and click [**Load**]. The [**Load**] button is only selectable when a file with the entered file name exists.
7. When finished click [**Exit**] to close the **Setup Data** window.
8. Change to the configuration screen.
9. Click [**Execute**] to execute configuration and [**Proceed**].
10. When done, leave the configuration program.

Copyright © 2004 Philips Medical Systems

14 TRANSFERRING CONFIG AND LOG FILES

Depending on the configuration (stand-alone EasyVision or complete PCR system) there are several ways to transfer files from/to EasyVision:

- Via internal floppy drive (Ultra 10 and SunBlade 1000/2000 only)
- Via USIT
- Via FTP
- Via CD-R
- Via USB memory stick

Please refer to the paragraphs below for the transfer method of your choice.

Nice to know

For backup and restore of **processing protocols** to/from floppy you may also use the **advanced user mode** of the USIT:

Select **Service**, password: **user**, select item 8. or 9.

14.1 Via internal floppy drive

1. Make sure the floppy is not write protected, then insert the floppy to the diskette drive of the EasyVision
2. Go to **Service Menu**
3. Select: **2 SunOS Menu**
4. Select: **2 Sun OS C-shell**
5. Enter the following commands:

cd /	change to the Root directory
mkdir floppy	make directory **/floppy**
mount -F pcfs /dev/diskette /floppy	mount the floppy to the Unix file system

6. To copy files **to** floppy enter
   cp </path/filename> /floppy example**:** ***cp /easydata/license.dat /floppy***

   To copy files **from** floppy enter
   cp /floppy/<filename> </path/filename> example**:** ***cp /floppy/license.dat /easydata***

7. When done unmount the floppy:
   umount /floppy

8. Enter ***exit***

NOTE

You must unmount the floppy. If you don't unmount, data on floppy may be corrupted.

14.2 Via USIT

To transfer files using a floppy disk the floppy drive of the USIT can be used. The files are transferred via network between EV and USIT utilizing the NFS connection. By this NFS connection drive **Z:** on the USIT is linked to the directory **/easydata/UI** on the EV RAD.

Please refer to the paragraphs below for transferring files from/to EasyVision/USIT.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

14.2.1 ... from EasyVision to USIT

At the EasyVision:

1. Go to: **Service Menu**
2. Select: **2 SunOS Menu**
3. Select: **2 Sun OS C-shell...**
4. Before files can be transferred to the USIT you need to copy the files to the directory /easydata/UI/configuration:
   cp </path/filename> /easydata/UI/configuration
5. When done leave the command prompt by entering ***exit.***

At the USIT:

1. Select: **Utilities** > **Service** > **5 OS/2 Command Shell**
2. Enter **z:**
3. The system prompts: **[z:\ ]**
   (you are now on the EasyVision RAD file system in the directory ***/easydata/UI***)
4. Enter ***cd configuration***
5. Insert an empty DOS formatted floppy in the USIT floppy drive
6. Now the files can be copied to the floppy:
   copy <filename> a: (example: ***copy protocol.dat a:***)
7. When done leave the OS/2 prompt by entering ***exit***
8. Remove the floppy from the floppy drive and go back to the USIT application

14.2.2 ... from USIT to EasyVision

At the USIT:

1. Select: **Utilities** > **Service** > **5 OS/2 Command Shell**
2. Enter ***z:***
3. The system prompts: **[z:\ ]**
   (you are now on the EasyVision RAD file system in the directory **/easydata/UI**)
4. Enter ***cd configuration***
5. Insert the floppy with the files on in the USIT floppy drive
6. Now the files can be copied from floppy to the EV RAD.
   Enter ***copy a: <filename>*** (example: ***copy a:protocol.dat***)
7. When done leave the OS/2 prompt by entering ***exit***
8. Remove the floppy from the floppy drive and go back to the USIT application

At the EasyVision:

1. Go to **Service Menu**
2. Select **2 SunOS Menu**
3. Select **2 Sun OS C-shell...**
4. Enter ***cd /easydata/UI/configuration***
   cp <filename> <path> (example: ***cp config.cfg /easydata***)
5. When done leave the C-shell by entering ***exit***

Copyright © 2004 Philips Medical Systems

14.3 Via FTP

This paragraph assumes that the file(s) to be copied are located in the current directory on the service PC.

Needed: An STP crossover patch cable, network hub or a connection to the hospital network for your Service PC.

1. Set the IP address and netmask of the service PC so that it matches the addresses of the EasyVision (e.g., if the EV IP address is 192.0.0.1 use for the PC 192.0.0.2.

2. Connect the crossover cable to EV and Service PC (or use the existing network or your personal switch).

3. At the service PC go to the command prompt.

4. To start the FTP program enter ***ftp <IP address>*** (enter the IP address of the EasyVision)

5. Enter the user name: ***Service***

6. Enter the password: ***<HostID>*** (enter the HostID of the EasyVision, e.g. 807a5f99)

7. Change to the directory on the EasyVision where you want to copy the files from/to: ***cd <path>***

8. Enter ***binary*** to set the FTP program to binary mode when transferring files others than text.

9. Send a file: ***send <filename>***
   Get a file: ***get <filename>***

   To transfer more than one file use the commands **mget** or **mput.**

10. When completed enter: ***bye***

14.4 Via CD-R

Transferring files to EasyVision can also be done using a CD-R by the following commands.

At the command shell enter

cd /
mount -o ro -F hsfs /dev/dsk/c0t2d0s0 /mnt (for SunBlade 1000/2000 and ULTRA 60 use 'c0t6' instead of 'c0t2')
cp /mnt/<filename> /<path> (example: ***cp /mnt/license.dat /easydata***)

Please note that the CD-R must be finalized and must not contain more than one session. CD-RWs are not supported.

14.5 Via USB memory stick

For transferring files it is possible to connect an USB memory stick SunBlade computer.

Prior using an USB device it **must be mounted within the Service mode**:

- Go to **Startup** Menu and enter **Service** mode.

- Go to command prompt.

- Connect the USB stick.

- Enter **mount_usb**

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

the system should respond with ***/dev/dsk/c4t0d0s0:c USB stick now mounted at /mnt***

The memory stick is now mounted to **/mnt.**

- Before removing the stick don't forget to unmount the device: ***umount /mnt***

Copyright © 2004 Philips Medical Systems

15 ERROR LOGGING

EasyVision RAD provides log files for operating system and application software.

Messages logged by the Solaris operating system can be found in the directory **/var/adm** in the files named **messages**, **messages.1** and **messages.2 .** The logs contain messages of the operating system like errors, start-up messages and warnings.
The file **messages** contains the latest logs. When this file reaches a defined size **messages.2** is deleted, **messages.1** renamed to **messages.2** and **messages** becomes **messages.1.**

Log files of the application software are written to **/var/adm/cdslog**.

Important logs are:

file name	software task / usage
cdRecordableServer_cdRecordable.log	CD-R server
computeServer_compute.log	
dbServer_db.log	database server
hcServer_hcs0.log	hardcopy unit server, printing
networkReaderServer_dmsReader.log	Reader server for DMS Readers: AC3/000, 9000
networkReaderServer_networkReader.log	Reader server for DICOM Readers: AC5/000, Compano, CosimaX, Corado
networkServer_export.log	Network server for export jobs
networkServer_import.log	Network server for import jobs
printJobServer_printJob.log	
systemMonitor_systemMonitor.log	System monitor, observes all software tasks

15.1 Collecting log files

There is a function implemented in the software to collect automatically or manually all log and config files and compress it to a ZIP archive named **evlog.zip.** This file is **only** generated **on EasyVision RAD** systems and contains **additional PCR specific** files, **different to other EasyVisions** where the file is named logfiles.zip.

evlog.zip is created in the sub-directory **/var/adm** (see procedure below). An existing evlog.zip file is renamed to **evlog0.zip**, evlog0.zip to evlog1.zip, and so on (up to evlog3.zip).

evlog.zip is also generated automatically when the software detects a crash of a system process.

*When sending error logs to the support group in Hamburg **please, please, please send always evlog.zip not logfiles.zip.***

evlog.zip contains:
- all log and *messages* files
- all config, customization and calibration files
- license.dat (software license)
- all PCR relevant files of **/easydata/UI/configuration**
- setup database (ZIP)

evlog.zip can be generated manually using the following procedure:

1. From the Start Menu select

2. Select **2 Go to Service Menu**
   Password: ***password***

3. Select **6 PCR Systems**

4. Select **2 File Transfer Menu**

5. Select **1 Collect & Send Logfiles**

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

16 PROCESSING PROTOCOLS

16.1 adbConvert

adbConvert changes the descriptive names of the presets as they appear on the preset panel of the EasyVision according to the current anatomy database on the USIT. Those MPM codes, which are not used on the USIT, are removed from the preset panel. It makes sense to apply this tool after having customized the anatomy database. adbConvert searches for processing keys in the Anatomy Database of the USIT and compares them with the keys on the EV. When a comparison matches the processing protocol on the EV is renamed using examination + view name from the anatomy database, e.g. Chest AP.

The program adbConvert is started as follows:

1. Make sure that USIT is up and running and the network connection to EV is established.
2. Go to Service Menu.
3. Select **6 PCR Systems**. This menu item is not displayed when there is no network connection to the USIT.
4. The PCR Systems Menu is displayed.

```
PCR Systems Menu:
1       File Transfer- and Compression Settings Menu
2       File Transfer Menu (log – and image file transfer)
3       adbConvert(synchronize Anatomy Database and ProcessingKeys)
4       Set Serial Interface Parameters
0       Return to Main Menu
   Enter the number of your choice:
```

5. Select **3 adbConvert** .

```
The PCR user Terminal Service Password is required.
Enter the password ([Enter] to take default password)
```

   To stop the process enter <**CTRL>+<Y>**, the prompt EV1# appears. Enter ***exit*,** the system displays the message: ***there are stopped jobs***. Enter again ***exit*** and the system returns to the startup menu.

6. Press <Enter> to take the default password.

```
Creating ADB file on PCR User Terminal.
The ADB file on the PCR User Terminal was successfully created.
Press Return to continue with the file transfer to EasyVision RAD and conversion of
the anatomy database:
```

7. Press <Enter> to start the conversation. The EV lists all actions done.
   At the end of the procedure the system displays:

```
stopping setupDbServer on EV1 for setup
Thu Aug. 5 17:10:37 MET DST 1999: setupDbServer stopped on EV1
The ADB Conversion is finished.
Press Return to continue:
```

8. Press <Enter> to go to the PCR Systems Menu.

Copyright © 2004 Philips Medical Systems

16.2 Installing Processing Protocols from Release 2.3

1. Go to main menu.
2. Select ***3 Service Menu > 2 SunOS-Menu > 2 SunOS-C-Shell.***
   A command-shell is opened.
3. Insert the EasyVision RAD 4.2 CD in the CD-ROM drive
4. Enter ***cd /APPLINST***
5. Enter ***Easy_tools_inst***
6. At the **Welcome** screen press <Enter>. The tools are installed.
7. When done remove the CD from the drive.
8. Enter ***cd /easydata/prop***
9. Copy the old **presets.apf** file to the directory **/tmp** (or any other directory of your choice). See also chapter **Transferring Config And Log Files** on page 116.
10. Enter ***dos2unix /tmp/PRESETS.APF presets.apf***
11. Enter ***makepf presets.apf ProcessingParameter.pf***. The presets are converted.
12. Exit service mode and start the configuration program.
13. **Execute** the configuration.
14. At question "**Keep-existing database**" select **Reset to factory settings.**
15. Start the application program: the old presets are there.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

17 ADVANCED PRINT FOR DIGITAL DIAGNOST

17.1 Introduction

EasyVision RAD is able from release 4.2L2 onwards to work as a dedicated print server for Digital Diagnost. Through this configuration Digital Diagnost is able to use printers and print formats configured on EasyVision RAD.

The so-called **Advanced Print for Digital Diagnost** option for Digital Diagnost is available as complete software/hardware package:

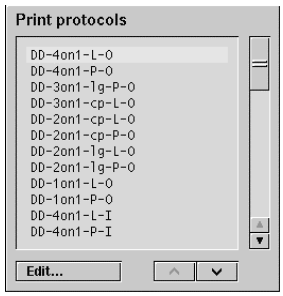
Advanced Print for Digital Diagnost **9896 050 05571**

EasyVision RAD hardware
EasyVision RAD software R4.2.L6
EasyVision RAD single user software key 4.2
EasyVision RAD PCR software key 4.2
EasyVision RAD EasyPrint software key 4.2

The Digital Diagnost can use only one EasyVision RAD at a time for remote printing and only one print function can be used at a time, either **HCU local print** or **EV remote print**.

The EasyVision RAD serving as a print server holds an ASCII file named **configuredPrinters.dat** in the directory **/easydata/UI/configuration**. This file contains all configured printers with their specific identification strings as they are used in the user interface of the Digital Diagnost. Every printer is listed in combination with real printer name, used film format, film type, etc.

For printing remotely via EV RAD the Digital Diagnost is using special print protocols. These protocols must be available on the EasyVision in order to perform printing. From release 4.2L2 onwards 20 default print protocols for Digital Diagnost are available on the EV RAD in addition to the other standard protocols.



Print protocols for Digital Diagnost are always starting with the prefix **DD** (see figure).

When upgrading from R4.2.L1 software and an existing customization has been kept, the 'DD' protocols do not show up in the list. In that case the protocols must be loaded manually. Please refer to the procedure below.

Restoring Default Print Protocols

The below mentioned items are language dependent and may show up differently. The procedure described keeps any existing print protocols. If a backup is needed please refer to chapter **Backup and Restore** on page 102.

1. Start the Customization tool.
2. In the screen area **Print Protocols** select under **Application package: PCR Viewing.**

3. Activate on the top bar **Restore PMS settings** and click **Save.**
4. Select again **PCR Viewing,** the **DD** print protocols plus any existing print protocols are now available.

Copyright © 2004 Philips Medical Systems

17.2 Setting up Advanced Print

Preconditions:

- EasyVision RAD 4.2L5 with the correct options running:
  Single user, EasyPCR, EasyPrint.
- When the EV has been upgraded from L1 software make sure the print protocols for Digital Diagnost are installed (see **Restoring Default Print Protocols** on previous page).
- Both systems, the Digital Diagnost and the EV RAD are installed properly and ready to operate on the network.
- The software license **EV remote print** must be installed on the Digital Diagnost and under **PRINTER OPTIONS EasyVision print** must be set to **Yes**.

Survey of Actions

EasyVision

- Configure the printer
- Set up a DICOM node for the Digital Diagnost
- Check that the Digital Diagnost print layouts are loaded
- Execute the configuration

Digital Diagnost

- In **DICOM Net Options** set up a DICOM node (corresponding to EV)
- In **Site information → EV Remote Application** select the EV
- Restart the system
- In **Imager definitions** activate all required printers
- In **Site information** select the **Default Printer**

17.2.1 Setting up EasyVision RAD

1. Start the configuration program:
   From the Startup menu select

   4 Go to Installation/Configuration Menu
   then
   2 Start Configuration

   password=***password***

2. Make sure a printer is configured (see also **Configuring printers** on page 76).

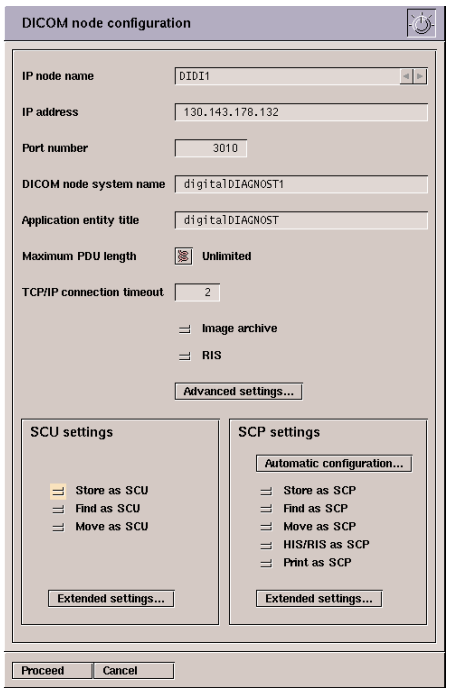
3. From the area of **Configured nodes** right-click and select **DICOM node.**

4. Click [**New**].

5. The **DICOM node configuration** screen is displayed. Enter the following data:

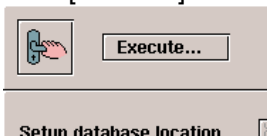
Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

IP node name:	hostname of the Digital Diagnost
IP address:	IP address of the Digital Diagnost
Port number:	3010, fixed for remote print
DICOM node system name:	name used within the EasyVision user interface
Application Entity Title:	AET of the Digital Diagnost
SCU settings:	select **Store as SCU** and deselect all others.
Extended settings:	select **CR Image**
SCP settings:	deselect all



6. When done click [**Proceed**].

7. Click [**Execute**].



8. Make sure **Keep existing local image Database** and **Keep existing processing presets** are selected and click [**Proceed**].

9. When done, exit the configuration program and start the application.

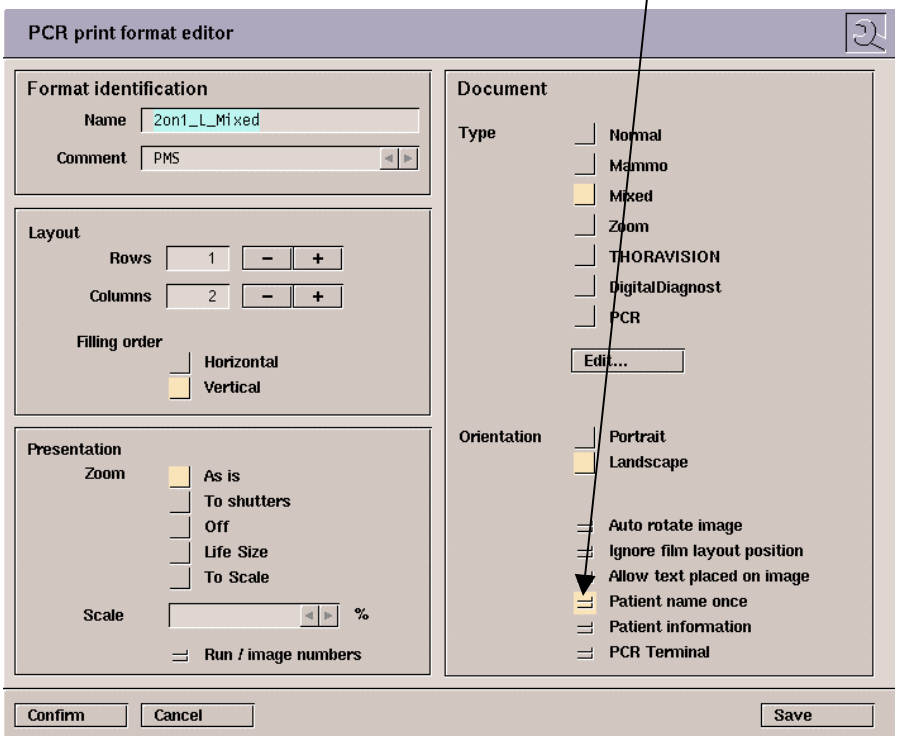
17.2.2 Setting up Digital Diagnost

For setting up the Digital Diagnost please refer to the Service Manual of the Digital Diagnost: **Subsystem Workstation**.

Copyright © 2004 Philips Medical Systems

17.3 Printing Digital Diagnost images and PCR images on same Film

Using the EV remote print functionality both image types from Digital Diagnost and from PCR can be printed on the same film. In this case use the option “Patient name once “ which can be activated in the PCR print format editor of the print tool.



The condition for this option to work properly is that all data elements listed below have to be identical for all images to be printed on the same film:

Attribute Name	Tag
Patient’s Name	0010, 0010
Patient ID	0010, 0020
Patient’s Birth Date	0010, 0030
Patient’s Birth Time	0010, 0032
Patient’s Sex	0010, 0040
Other Patient Names	0010, 1001
Patient’s Birth Name	0010, 1005
Accession Number	0008, 0050
Institutional Department Name	0008, 1040
Institution Name	0008, 0080
Manufacturer	0008, 0070

If the option “Patient name once” has been selected but one or more of the images printed on the same film does not conform to another image regarding at least one of the data elements above listed the patient name is not printed on the film at all. The name field on the film is filled with “ *** “. This film is not valid and cannot be used.

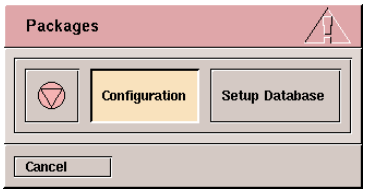
An image can be temporarily printed out with the option “Patient name once” switched off. On this film the patient name is printed on any of the images.

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

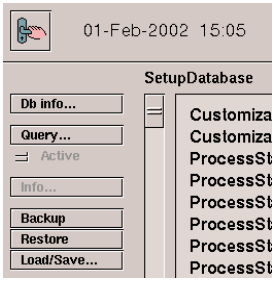
18 RECOVERING THE PASSWORD FOR THE PROCESSING TOOL

Here is a procedure to recover a forgotten password for the processing tool.

1. Enter the configuration program (see **Starting up the configuration program** on page 64).
2. In the configuration screen click .
3. In the window **Packages** click [**Setup Database**].



4. The screen **Setup Database** is displayed.



5. Select under **Customizable Object** the file **PresetPassword**.
6. Either read out the password via [**Info**] or delete this line by clicking [**Delete**].

Copyright © 2004 Philips Medical Systems

19 REMOTE SERVICE VIA VNC

1. Start a Telnet session to the EasyVision, user: Service , password: <HostID>.

2. The Service Menu is displayed:

```
Service Menu
============

1     Diagnostics Menu    (sunvts and product diagnostics)
2     SunOS Menu          (optical disk format and SunOS commands)
3     File Menu           (file transfer and manipulation commands)
4     Printer Menu        (Printer tests)
5     VNC Menu            (Remote Configuration / Customize / Desktop)
6     PCR Systems         (PCR diagnostics menu)

0     Logout

Enter the number of your choice:
```

3. Select **5. VNC Menu**.

4. When VNC is started for the first time the system asks to enter a new password:

```
This is the first time the VNC menu is accessed.
The password for the VNC server is currently NOT set.

As other persons can work simultaneously on the application,
started via the VNC Menu, you have to supply a valid password.
The other persons need that password to get access.

It is suggested to use the hostid of this system (80XXXXXX).

Please enter the new password below.
Password:
Verify:

Press enter to continue...
```

5. When done, the VNC Menu is displayed:

```
VNC Menu:       The Application is running
=========

1     Shutdown Application (E.g. needed to change EasyVision IP address)
2     Start Configuration  (VNC server and Configuration is started)
3     Start Customize      (VNC server and Customize is started)
4     Start Desktop        (VNC server and a Desktop is started)
5     Reboot               (Connection lost !!)
6     Change VNC settings  (E.g. viewer port, browser port)

0     Return to Startup Menu

Enter the number of your choice:
```

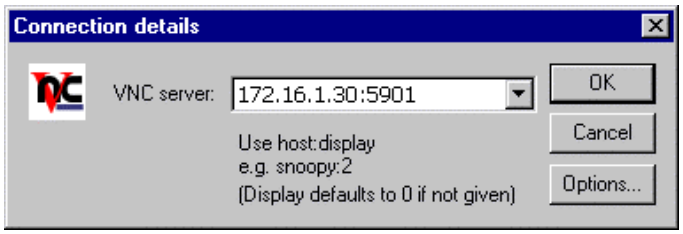
6. Select the desired option. The VNC server is started and displays the actual settings for hostname, viewer and browser port. Do not start the viewer on the EasyVision:

```
Starting the VNC server...done
   hostname     = de25sj
   viewer port  = 5901
   browser port = 5801
   size         = 1280x1024

The VNC viewer for Windows can be found in /tmp/vncviewer.exe
The VNC viewer for Solaris can be found in /easy/service/vnc/vncviewer
All the original VNC packages are located in /easy/service/vnc/packages

Do you want to start the VNC viewer on the EasyVision system (Y/[N]) ? n

The desktop will now be started. Exit the desktop to return to the VNC menu.
```


Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED

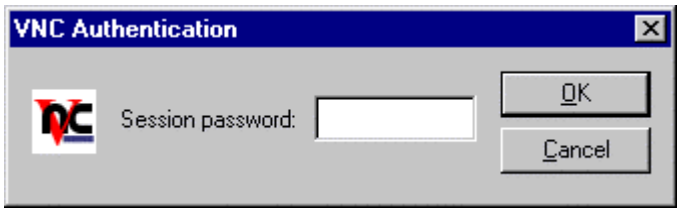
7. On the remote PC start now the VNC viewer or a browser (Internet Explorer, Netscape, etc.).

VNC viewer



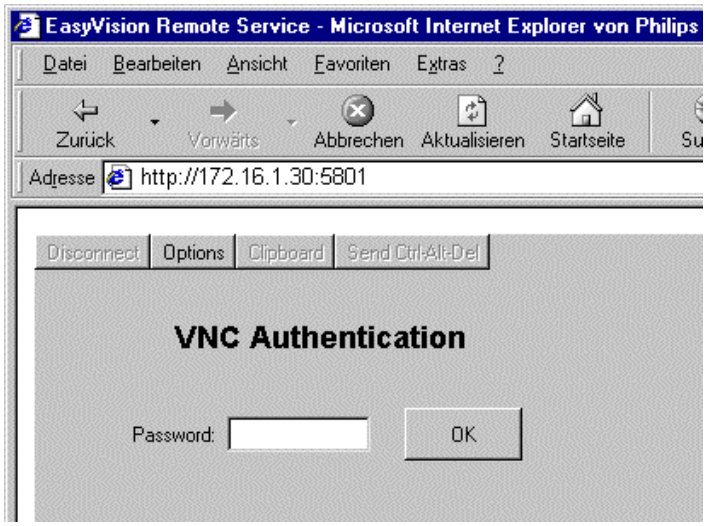
Enter the hostname and the portnumber 5901separated by a colon (:) and click [OK].

Enter the VNC password and click [OK]:



Browser

As address enter the hostname and the portnumber 5801separated by a colon (:) and press <Enter>.



Enter the VNC password and click [OK]:

8. When done, press <Ctrl>+<C> to stop the VNC server on the EasyVision.

Copyright © 2004 Philips Medical Systems

20 COMMUNICATION WITH PHILIPS MEDICAL SYSTEMS

Problem reporting

Problems, which may be related to an error in, the system should be reported via e-mail, fax, phone or, if parts are to be returned, mail to **Help Desk Hamburg**:

Philips Medical Systems
Help Desk Xray Hamburg
D-22335 Hamburg
Germany

Tel. : +49 40 5078 - 2369 or 2037
Fax : +49 40 5078 - 2348
E-mail : Helpdesk.Xray.Hamburg@philips.com

Field Problem Reports should be sent as an enclosed file of an e-mail to Help Desk Hamburg. Please use the program PRForm-2 to create FPR files. To get this program ask your local CS manager or representative to get it via Lotus Notes.

Please check first the FPRview database, the TechTips of PCR on the Intranet to find out if your problem is already known. Please use the Intranet frequently to check for the latest news.

*When sending error logs to the support group in Hamburg **please send always evlog.zip not logfiles.zip.***

Copyright © 2004 Philips Medical Systems
ALL RIGHTS RESERVED